The

Personnel and Guidance Journal

Volume XXXV January, 1957 Number 5

Backgrounds of Vocational Choice: An Apache Study . . . . . *William T. Ross and Golda Van Buskirk Ross* 270

Counseling as a Function of the Counselor's Personality . . . *Henry Weitz* 276

The Holzinger-Crowder Uni-Factor Tests . . . . . *Norman A. Crowder* 281

Comments . . . . . *Donald E. Super* 287

Values and *Disvalues* of Faculty-Student Committees . . . *Herbert Stroup* 289

Student Leadership in a Program of Co-Curricular Activities . . . . . *Elizabeth A. Greenleaf* 293

Concurrent Validity of The Mooney Problem Check List . . . . . *Stanley L. Singer and Buford Stefflre* 298

Do Renewable Scholarships Promote Higher Grades? . . . *Selby G. Clark, E. Wayne Wright, and Clyde A. Parker* 302

Comments . . . . . *Daniel D. Feder* 305

The Relation of Extracurricular Participation to Leadership Criteria . . . . . *John D. Krumboltz* 307

A Series on In-Service Training . . . . . *Joseph Samler* 315

Fellowships, Scholarships and Assistantships For Guidance and Personnel Graduate Training . . . . . *George D. Changaris* 316

DEPARTMENTS

Washington Flashes 268

From the Executive Secretary . 330

Letters to the Editor 331

Branch Notes 331

Who's Who 332

Books Reviewed 333

The Personnel and Guidance Journal is published monthly, September through May, by the American Personnel and Guidance Association, Inc., at 20th and Northampton Streets, Easton, Pa. Annual Subscription, domestic, $7.00; foreign and Canadian, $7.00; single copies $.80. Make checks payable to the American Personnel and Guidance Association, Inc. Subscription and Editorial Office at the Headquarters of the Association, 1534 "O" Street, N. W., Washington 5, D. C. Entered as second-class matter at the Post Office in Easton, Pa. under act of March 3, 1879. "Copyright 1957, by the American Personnel and Guidance Association, Inc.

WASHINGTON FLASHES

Transmitted by Max F. Baer

BABY BOOM CONTINUING

Stork working overtime: Birth total in United States during 1956 set all-time record of 4,202,000, according to U. S. Public Health Service. This is rise of 111,000 births or almost 3 per cent above 1955. Birth rate in 1956 was 25.1 per 1,000 population. Compare these figures with 2,559,000 births and 19.4 birth rate in 1940.

SCHOOLING FOR WAR ORPHANS

Orphans seek benefits: Applications for War Orphans Schooling benefits under recently enacted Federal law are expected to reach total of 10,000 to 15,000 by beginning of next summer, according to Veterans Administration. Over 96 per cent of first group of young people to apply are using benefits to go to college. Remaining 4 per cent are taking below-college level courses, permitted by law so long as they lead to definite vocational goal.

Eligibility: War Orphans Schooling is available to sons and daughters of war veterans who died of service-connected disabilities. Students must be between 18 and 23 years of age, although under certain circumstances it is possible to begin school before 18 and continue beyond 23.

Amount of benefits: Young men and women may receive up to 36 months of education, during which time they will get VA allowances of up to $100 a month. Before starting school, applicants will receive VA's vocational counseling to help them decide upon vocational goal and educational program leading to that goal.

Where to apply: Application should be made to nearest VA Regional Office, not at VA District Office handling death benefit payments.

EARNINGS OF SCIENTISTS

New Survey: More than 94,000 scientists supplied information about their employment, income, education, age, scientific specialty, and other professional and personal characteristics for National Register of Scientific and Technical Personnel now being maintained by National Science Foundation and professional scientific societies. Information was reported on Register forms completed between late 1953 and early 1955. Because information is based on voluntary registration with cooperating professional

societies, characteristics of scientists included are not necessarily representative of all scientists. For example, this group shows higher educational attainment and somewhat older median age as compared with all scientists employed in nation. This would tend to boost median earnings.

What they earned: Median annual salary reported for all respondents in all fields was $6,525. Physicists did best with median annual salary of $7,275, followed closely by geologists with $7,250. Then came mathematicians with $6,300, biologists with $6,275, meteorologists with $6,050, astronomers with $5,950. Psychologists trailed with earnings of $5,850. Median of $7,000 for scientists with Ph.D. degree was, on average, $875 more per year than was earned by those with less training. Questionnaires for chemists and chemical engineers did not ask for information on earnings.

AIR TRANSPORTATION GROWS

Ten-year phenomenal growth: Between 1946 and 1956 revenue passenger miles flown by common carriers almost quadrupled while freight and express multiplied six times, says Bureau of Employment Security. Employment rose from 81,700 in 1947 to more than 130,000 last September.

Concentrated in five states: Every state in union has at least a few air transportation workers. But New York State leads and California is second. Next in order come Florida, Illinois, and Texas. About three-fifths of industry's employment is based in these five states. About two-fifths of workers are located in New York City, Miami, and San Francisco.

Future outlook: Ten years ago first class travel by rail was three and one-third times travel by air. Today situation is exactly reversed. Railroad passenger traffic is also losing heavily to travel by private car. Between now and next March, employment in air transportation is expected to increase by another 5.4 per cent. Given continued general prosperity, Labor Department expects number of people employed in this industry to continue growing. Even though turnover is low and layoffs are unusual, quit rate of 1.8 per cent last August meant replacement jobs for 2,100 workers.

NEW OCCUPATIONAL OUTLOOK PUBLICATIONS

Handbook: Revised Occupational Outlook Handbook will be off press next summer, we are told by Bureau of Labor Statistics. There will be somewhat better coverage of atomic energy, electronics manufacturing, science.

Periodical: You can now get quarterly publication called "The Occupational Outlook." This will enable BLS to maintain flow of up-to-date information on occupational outlook. First issue out in February, second in May, third and fourth in Fall. Order for $1 per year from Superintendent of Documents, Government Printing Office, Washington, D. C.

BACKGROUNDS OF VOCATIONAL CHOICE:

An Apache Study

IN THE SUMMER of 1955, we were invited by the Business Committee of the Mescalero Apache Indian Tribe to conduct a vocational guidance survey. To our knowledge, this is the first time such a study has been made on an Indian Reservation at the instigation and expense of the Tribe itself. This decision to have the survey made was the result of careful deliberation on the part of the Business Committee and the Reservation Superintendent.[1] It is now looked upon by both the Mescaleros and ourselves as the initial step in a long range study of interpersonal and community relationships.

Background Factors

The story of the Mescalero Apache Reservation has since been reported elsewhere,[2] but here are the pertinent facts as we found them on our arrival. High in the White Mountains of south central New Mexico, on a reservation of 719 square miles, 1,200 Mescalero Apaches are attempting to perfect their economy and autonomy with the view to becoming increasingly independent of government control and patronage. Although the few who have gone elsewhere to live—mostly to the west coast—have done well, by and large the people do not want to move away from their Reservation. With approximately 4,000 acres of tillable land, nearly 200,000 acres of open grazing land, and around 250,000 acres of forest land, they see their problem as one of developing their own resources.

While most of the people live in small clusters of well constructed white frame homes scattered over the Reservation, the concentration of activity is in the community of Mescalero itself. Here are the Administration Building of the Indian Agency, the government-supported hospital, a general store, the school, the post-office, two churches—one Catholic and one Protestant, a garage, a woodyard, a cooperative employees' club, the homes of most of the government personnel, and a good many Indian homes. On the fairground nearby is held the annual Fourth of July celebration, the remnant of old tribal rites, now presented as much for the benefit of tourists as for the maidens in whose honor they were formerly held.

All, except for a handful of older people, speak English with little or no accent. About ten per cent of the Tribe, including five women, have been in the armed forces; and a good many others have traveled extensively or attended school off the Reservation. As a whole, they are friendly and cooperative. They are inclined to wait until spoken to by strangers, but respond pleasantly, sometimes heartily, more often shyly. Many of them talked very freely after becoming acquainted, but generally they are inclined to watch to see "who goes there" before divulging much personal or community information.

With the exception of the July festival

WILLIAM T. ROSS is with the Department of Social Science at Michigan State University, East Lansing.

[1] The Business Committee here approximates the Tribal Council of other American Indian Tribes. At the time of this study Mr. Wendell Chino was President of the Committee, and Mr. Walter O. Olson was Reservation Superintendent.

[2] In forthcoming issue of *Life Magazine*.

WILLIAM T. ROSS

and

GOLDA VAN BUSKIRK ROSS

and little groups of people chatting along the street or in front of the store or post-office, there is little evidence of socialization. School movies and community get-togethers sponsored by Agency officials are not well attended. For shopping and for recreation, the people tend to go to the nearby towns to spend their money.

Livestock production constitutes approximately one-half of their total individual economy; farming, another fourth; and wage work, the rest. Timber sales revenues are returned annually to the Tribal fund which is used to defray costs of Tribal affairs, including relief rolls, and government. Two projects which have been under consideration for some time are a local sawmill and a tourist enterprise. The Tribe also operates the general store, the woodyard, and a picnic ground to which outsiders are charged admission.

On the Reservation, some of the Indians work for the Tribe and others for the government agency, in offices, on the roads, on construction and other projects, and as service personnel. A few of the women augment the family income through an arts and crafts program now being promoted by the extension agent, herself an Apache. Their beaded buckskin bags and dolls are on sale in the Administration Building and at the July ceremonies. One man trained in art at Santa Fe, along with Harrison Begay, Alan Hauser, and other well-known Indian artists, does excellent work; his Crown Dancers and other figures are found on the walls of most of the offices. Without a doubt, he could sell more than he is now producing, but he often puts off orders for pictures, saying he is too busy. He finds more security working for salary, first as a plumber at the hospital, then recently as the maintenance engineer when the non-Indian encumbent was transferred. Another younger man who had two years of art training at the University of Arizona is being encouraged by his family and friends to continue his art work, but he insists he is better off with his present job as bookkeeper in the Tribal Office. Other individuals who work at art in one form or another in their spare time insist it is only a pastime, that they are not artists and could not earn a living thus.

None of the teachers, and no more than half of the hospital staff are native Mescaleros. The priest and the minister at the churches are both from outside. All of the major Agency personnel—engineers, forestry experts, soil conservationists, and so on—are also from the outside, with the recent exception of the maintenance engineer mentioned above.

Nearby towns such as Ruidoso, Tularosa, and Alamogordo, offer some employment off the Reservation. Several men work at the Holloman Air Base, twenty miles away. Last fall White Sands Proving Grounds needed five hundred men for skilled and unskilled jobs, a few of the Indians applied for these jobs successfully; although commuting thirty-five miles to work each day may prove a hardship, especially when the roads are likely to be covered with snow and ice in the winter.

First Steps in the Survey

Our problem, then, was to classify individuals for available jobs and to help those who want and can profit by further training to determine where best they can fit into the Tribal economy.

After careful consideration of all the problems involved (we anticipated more cultural and language difficulties than actually existed), the following tests were selected for use in the survey in spite of our misgivings as to the limitations of non-verbal tests:

SRA Non-Verbal Form[3]
Kuder Preference Record
Flanagan Aptitude Classification Tests[4]
PROJECTIVES:
Rorschach
Personal Preference Scales[5]
Krout Symbol Elaboration Tests[6]

Our plan was to determine the aptitude and capacity battery on the basis of the findings on the intelligence and interests tests, as well as on the personal information gained in the initial interview. Projectives were included when indicated by the other data or whenever time could be arranged in the schedule.

A spacious suite of rooms back of the post-office in the old Administration Building afforded ample space for testing and interviewing. Except for one rainy day when the entire road crew came in with their foreman who instructed us to keep them busy until quitting time, there were never more than ten people taking tests at one time. Generally, they dropped in one at a time or in small family or work groups when weather and the daily schedule made it convenient to spend some time in town. A few people did not return for the second round of tests after worrying through the Kuder which gave them some trouble because they were not familiar with all the activities listed and were too shy to ask questions often. Aptitude tests were not offered to the younger children who were tested at school for comparative intelligence and interest data—sixth, seventh, and eighth grades. In cases where considerable difficulty was experienced in comprehending directions, the more complicated tests, such as Tables and Scales, were omitted from the prescribed occupational battery. Otherwise every testee had from two to fourteen of the tests, depending upon his interests, abilities, and endurance. Some people evinced no interest in the outcome of the tests; others returned to discuss not only the tests but also their hopes and plans for the future, where to go to school, what jobs might be available, and the possibility of tribal scholarships.

Within this voluntary, permissive setting, about 175 people were tested, including some non-Apaches—Indians and Mexicans who have married into the Tribe, and some of the government-employed whites and their children who took advantage of the service. Rorschachs and occasionally one or two other projectives were given to about a third of these people. For purposes of statistical analysis, we have included in our sample only the Mescalero Apaches, 143 in number.

The average age for our sample was 29 with a range of eleven to fifty-nine years. The mean educational level was 8.9 with the mode falling around the ninth grade level. Only one of these had never attended school, although he had learned to read and do simple arithmetic on his own; and one was a college graduate. Some were employed full time on jobs which they had held for some time; some had worked intermittently at one job after another; and a few were unemployed and had been so for a year or two. Represented were office workers, road crewmen, cooks, woodcutters, fire-fighters, machine operators, store cashiers, students, and housewives. Several people not now employed had had business college training; one woman plays the church organ; and others had received earlier training in such diverse skills as shoe rebuilding, plumbing, and various arts and crafts.

Test Findings

The average *SRA Non-Verbal* IQ for this sample was 98.12 with a range of 66 to 138. A breakdown by age groups, however, showed these interesting variations:

Age Group	*Average IQ*
10–19	103.75
20–29	101.26
30–39	97.26
40–49	85.28
50–59	85.8

[3] Science Research Associates, Chicago, Illinois.
[4] John C. Flanagan, American Institute for Research.
[5] Maurice H. Krout and Johanna Krout, Chicago Psychological Institute.
[6] Johanna Krout, Chicago Psychological Institute.

Whether the decrease with age is due, as some of the older people lamented, to the fact that they were not accustomed to using pencils on a speed performance or had forgotten their seldom-worn glasses, or whether it may be attributed, in part at least, to limiting personality involvements which are more "set" in the older people is a problem for further study. That age alone does not explain the phenomenon is shown by the fact that the highest score appeared in the 20–29 group, and three superior scores came within the 30–39 age group.

The interest patterns of these people as shown by the combined data on rank order of choice reveal a strong bent toward clerical and outdoor-mechanical activities at all levels from unskilled to highly specialized. There is also a strong inclination toward artistic pursuit. Computational interest is above average, also, although it was found that capacity did not measure up to interest. Least concern is indicated for social-persuasive activities. (See TABLE 1 for means of rank orders of choice and number giving first or second place to each category of the *Kuder*.) In the few cases where the test did seem to reveal some interest in dealing with people, the interview brought out either little inclination toward or a definite rejection of social welfare or promotion as permanent employment; nor did other evidence tend to encourage such employment, in most cases.[7]

Our first general assumption might be that the people tend to "like" the kinds of work which they know about and which are currently available, but we have reason to believe that there is more to the picture. In discussing the eventual progress of the community, they can see the need for salespeople, personal service workers, beauticians, barbers, waitresses, teachers, nurses, and public relations and promotion personnel, but they are quick to say that someone else can do that, not they. Our personality tests[8] show even more clearly that the lack of interest is real and deep-seated: as a group and as individuals, they show a very limited ability to empathize and to form close object relations; they have settled their anxieties by withdrawing, avoiding close personal relationships, supposedly in the effort to avert further frustration in meeting their affectional needs.

An analysis of the results of the FAC Tests shows limited correlation with interests. TABLE 2 shows the means of the stanine scores for the fourteen tests; and

TABLE 1

Preferences Indicated on Kuder Preference Record Arranged in Rank Order

Rank Order	*Occupation*	*Mean of Rank Order*	*Number of Times Selected as First or Second Choice*
1	Art	4.47	46
2	Clerical	4.57	47
3	Outdoor	4.94	35
4	Computational	4.97	33
5	Mechanical	5.28	39
6	Music	5.41	26
7	Persuasive	5.90	12
8	Social Service	6.07	19
9	Literary	6.10	17
10	Scientific	7.02	14

TABLE 3, the means for occupational batteries where given in sufficient numbers to be significant. Average scores or better were made in mechanical and clerical fields. Below average scores appeared more frequently in tests requiring integrative perception—in judgment and comprehension (dealing largely with judgment in handling people), and in arithmetic. The low scores in arithmetic tend to lower the average in all batteries requiring that kind of ability. In view of the fact that the people have learned English so well, as evidenced by both their speech and their test scores, we

[7] The one outstanding exception, the man who made social service his first choice by a wide margin, was trained for the ministry but was made Chairman of the Business Committee before getting very far into that career; an excellent speaker, he not only has a full-time job looking after the welfare of the people on the Reservation, but also represents the Tribe outside, in Washington, in the area offices of the Indian service, and in dealing with civic groups in the state. Why he is different from the others, neither he nor we can say at this point.

[8] Manuscript on Rorschach findings in preparation.

TABLE 2

Rank Order and Mean Stanine Scores on Individual FAC Tests

Rank Order	*Test*	*Mean Stanine Score*
1	Scales	5.86
2	Memory	5.38
3	Coding	5.33
4	Tables	5.10
5	Mechanical	5.04
6	Precision	4.65
7	Expression	4.40
8	Coordination	4.28
9	Inspection	4.03
10	Patterns	3.95
11	Judgment & Comprehension	3.45
12	Assembly	3.38
13	Components	3.31
14	Arithmetic	2.57

TABLE 3

Mean Stanine Scores on Occupational Batteries

Occupational Battery	*Mean Stanine Score*
Clerical	4.74
Secretarial	4.44
Accounting	4.36
Sales	4.11
Mechanic	4.06
Machinist	3.99
Business man	3.95
Art	3.90

can only hypothesize as to the reasons for the deficiency in arithmetic. (Those who work regularly with figures explained, when questioned, that they used office machines to do their calculating and had grown rusty and slow in simple addition and subtraction; others said they had always been slow, or had forgotten what they learned in school.) One possibility, in addition to what may have been poor training in school, is that these people do not like to work with details and figures. That they are prone to perceive things as a whole, not as discrete parts, is amply demonstrated on the Rorschachs. (They may have retreated from the inter-personal relationships of life, but not into the minutiae of reality; only two compulsive types were found in our personality sample.) Whatever the causes, this inadequacy might prove a real handicap in many chosen professions, as well as in handling everyday business transactions. Likewise, in the case of art, where a high degree of interest was indicated, the mean on the aptitude battery was only low average. As has already been mentioned, few of those showing high interest in this kind of activity had any idea of making a living thus; there must be another reason for the interest. Our theory here is again based on the personality findings: having cut themselves off from other means of self-expression, particularly with regard to people, they need some emotional outlet, hopefully to be found in creating things with their hands. For a smaller fraction of the group, music might very well serve the same purpose.

Immediate Recommendations

As already pointed out, the findings on the projective tests explain in part, at least, the biased nature of the interest and ability patterns. Our observations of infant care, interview data, and the test data all point to the probability that the affectionally frustrated personality patterns go back to early patterns of family relationships and patterns of enculturation. If further study proves this to be the case, the ultimate solution to the problem will be found only in the re-education of the present population for the better adjustment of future generations. This will necessarily involve a study of cultural history of the group to find which of these patterns are anachronistic, based on needs which no longer exist, and thus to be modified with the gaining of new insight. While this is a long time program and not an easy one, it seems worthwhile in terms of the future welfare of the group. A nursery school has already been recommended as one means of providing training in socialization for very young children.

Until the time when the situation can be corrected from the roots, various recommendations have been made for improving the situation by increasing the socialization and self-expression outlets of the group; a

nursery school, adult education classes, community sings and dances, a study of their own social and cultural history as a means of reviving their former interests as well as their self-respect as a tribe and hence as individuals, an expanded arts and crafts program, and a scholarship fund for the education of promising young people who can profit by advanced training and then return to contribute to the community welfare. These are temporary expedients, but we feel that the process of helping themselves so far will contribute to the total solution also.

This is not to say that they will not need help in implementing such proposals. Money for the salary of a well-trained and understanding nursery and kindergarten director, who could work with parents as well as children, would be well spent, until some of the young Indian girls can complete such training and take over the work. Instruction for the adult education classes we hope can be provided without cost to the Tribe by visiting professors who are planning to do further research on the Reservation. (Two musicians from Baylor University, an English and speech professor from Western State College in El Paso, Texas, an anthropologist from Harvard, and the authors are all expecting to be working there for several more summers.) We think the aforementioned Apache artist can be persuaded also to start a painting class for adults. With such assistance and encouragement, we believe the Mescaleros can organize and develop their own community self-help programs.

An ongoing analysis of the changing Mescalero economic system is still to be made, but we are already in a position to point out some of its present deficiencies. If the Tribe sets in operation certain projects which are now in the planning stage, they will need more leaders and promoters. They need people to sell their own products and to render the services for which there will be a growing demand as their proposed projects develop.[9] The current practice of paying outsiders, at a much higher rate than they themselves can earn with their present capacities, results in an imbalance of input and output. By learning to perform these services themselves an increased circular flow of income within the Reservation could be achieved.

While this community is unique in many ways, it also shares many common elements with other less homogeneous groups. What is generally true here is true in part elsewhere. What started as a relatively simple vocational guidance problem, develops into a need for a total community study—economy, history, enculturation—to provide sufficient insight for intelligent re-orientation.

[9] Since this was written, the newly appointed manager of the store and Summit Project is already concerned with the problem of finding suitable service and sales personnel among the Apaches.

MORE WOMEN GOING INTO BUSINESS AND INDUSTRY

The National Manpower Council, affiliated with Columbia University, is releasing a study on womanpower which stresses that vocational schools will have to give more attention to the training of girls, young women and what is described as mature women, meaning those over 50 years of age. Of special interest to vocational educators is the estimate that within the next decade 5,000,000 girls and women will take jobs in industry and business. The demand for their training and education will be great.

As one response to this pressure of the times, the U. S. Office of Education has named a specialist in the industrial training of girls and women. She is Mrs. Mary S. Resh, formerly principal of a girls' vocational school in Washington, D. C.

COUNSELING AS A FUNCTION Of the Counselor's Personality[1]

HENRY WEITZ

COUNSELING INVOLVES the interaction of two personalities through the medium of speech and other symbolic behavior. It is reasonable to suppose, therefore, that the structure of each of these personalities will have a marked influence on the interaction. It may be hypothesized further that the ways in which the personality structure of each of the counseling participants is symbolized in the speech of the interview will also have a marked effect upon the interaction.

If it is true that the counselor's personality influences the direction, course, and outcome of the counseling interaction, it might be profitable to speculate about the kinds of counselor personality traits which are likely to facilitate counseling and those which are not. Such speculation, to serve any useful purpose (*e.g.*, as a means of establishing hypotheses which may be subjected to rigorous scientific testing) needs to be intimately related to some meaningful formulations about the counseling process and how it operates in assisting the client to achieve adjustment.

The Counseling Process

The counseling process may be thought of as a small segment of *some* problem-solving situations. An individual encounters some element in himself or in his environment which represents an obstacle to his ongoing behavior or to the satisfaction of one or more of his drives. When attempts to use previously learned behavior patterns prove ineffective in overcoming the obstacle, anxiety is aroused. The anxiety provides additional impetus to try new combinations of old behavior or to invent new behavior to overcome the thwarting of satisfactions.

Most people, in most situations, solve their problems (overcome their obstacles) in this way. A few find their problem solving attempts ineffective and as one additional piece of behavior designed to reduce their tensions, they take their problem to a counselor.

Our anxiety-ridden individual, who becomes a "client" the moment he is seated across from the counselor, describes his problem. In so doing he abstracts from the real events in which he participated certain elements which, at the moment, he perceives and to which he gives verbal labels. The real events in which he participated and the objective elements which brought on his present state of anxiety are not the same things as the symbols he uses to describe them.

The counselor meanwhile listens to this recital of events and uses all the tricks in his bag including tests, records, medical examinations, case histories, and the like to get a clearer picture of the elements in the event which caused the client's anxieties. Into all of these symbols—the client's words, the test scores, the medical records and the like—the counselor projects his own experiences and feelings and from this combination of his client's symbols, documentary symbols, and the verbal symbols of his own projections, the counselor derives his diagnosis.[2] This diagnosis is made up of verbal symbols representing objects, events, conditions, *etc.*, and representing also the interrelationships among these elements. It is important to note that (except in unusual

HENRY WEITZ is Director of the Bureau of Testing and Guidance at Duke University, Durham, North Carolina.

[1] Adapted from a paper presented at the South Carolina State Guidance Conference Sponsored by the South Carolina Department of Public Instruction and Winthrop College on February 7, 1956.

[2] Weitz, Henry. Semantics in diagnosis. *J. Couns. Psych.*, 1954, *1* (2), 70–73.

instances) the counselor can never participate in or deal directly with the client's problem, or the events which initiated it, or the client's anxiety. He can deal only with the symbols abstracted from these events.

These symbols representing the diagnosis are now manipulated by the client and counselor. New relationships among these objects and events are generated. New responses to these new relationships are explored, but always symbolically.

If some new response suggested by the client or the counselor as a result of this symbolic manipulation of objects and events seems to reduce the anxiety of the client, he will be inclined to make the new response again. At first only symbolically. Each time the client talks about a piece of behavior and his anxieties are reduced, the behavior (symbolically) is reinforced, and the client comes to learn the behavior (still symbolically).

Objectifying Counseling

This process of reinforcing symbolic behavior by means of anxiety reduction continues outside the counselor's office, for the manipulations initiated in the counselor's office persevere in the thinking of the client after he leaves the office and in his talking about the counseling experience with other people.

Just as it is possible to abstract symbols from objects and events, so is it possible to objectify symbolic behavior. Just as words may be derived from things, so things may be objectified from words, much as a poet translates his love ballad into a kiss for his lady fair. The process of abstraction is reversible in the process of objectification, and life flows back and forth between words and deeds with one generating the other.

In this way then, the client, who has learned to perform a piece of behavior symbolically, can objectify this learned behavior. If it too tends to reduce his anxieties, this objectified behavior will be learned and his problem solved thereby.

This, then, is the counseling process, in general terms. It operates in this way whether the problem is as simple as selecting a course for the next semester or as complex as choosing a mate.

The Counselor's Personality

Within this framework of the counseling process the counselor's personality must operate. The counselor's personality traits and the ways in which he communicates these traits to his clients will determine his effectiveness as a counselor.

Observation of counselors has led the present writer to speculate that three traits are essential to effective counseling. These traits cause the counselor to behave in ways which demonstrate that he is secure, sensitive, and objective. These personality patterns, then, of security, sensitivity, and objectivity seem critical in the counseling interaction.

What precisely is meant by security, sensitivity, and objectivity? More specifically, how does the behavior of people characterized by these traits differ from the behavior of people who lack them?

By security we mean a sense of self-acceptance. This involves a frank recognition of strengths *and* weaknesses. The secure person is publicly aware of his limitations (that is to say, they are not repressed or suppressed) yet is not threatened by them. His inability to play golf as well, or think as well, or even love as well as some of his acquaintances causes him no emotional pangs although he is intellectually aware of these limitations. His membership in one or another religious, racial, political, or aesthetic minority group gives him no sense of inferiority. His skills, his talents, his special competences are frankly and openly accepted with equal serenity, with no feeling of pressure to display them to excess. He accepts other people as they are, recognizing within the limits of his perceptions their needs, and expects to be accepted on the same terms by them, and he usually is.

The sensitive person is the individual who is capable of generalizing his own feelings of self-acceptance to the acceptance of other people. He avoids, in so far as possible, evaluating others, or when he does, he attempts to make his evaluations on their terms rather than on his own. He recog-

nizes that present behavior has its roots in past experience, so that when he reacts to the present behavior of another person he knows that he is reacting to a total psychological biography involving an emotional-intellectual history. The sensitive person is capable of understanding and appreciating a wide range of psychological behavior.

The objective person is capable of distinguishing between objective and symbolic behavior, yet understands the intimate relationship between these two. He knows that a child is not necessarily good when he is called a "good boy" nor a criminal when he is called a bad one. He differentiates between events and abstractions. He recognizes further that no two objects or events are ever the same, and that from one moment to the next no single object is the same. (You can't step into the same river twice, for the river changes from moment to moment.) He distrusts and fears labels, and generalizations, and principles, and especially absolutes. Life, to the objective person, is a series of discrete objects and events, each interacting with the other over vast as well as infinitesimal time and space, each influencing the other, yet each distinct from the other.

A person with highly developed traits of security, sensitivity, and objectivity behaves certain ways in the counseling situation. And the ways in which he behaves will influence the learning behavior of his client. Let us examine a counseling situation and see how these traits are likely to influence the interaction.

The Case of Willie

Willie Shultz, the only child of immigrant parents, is encountering a series of difficulties in the tenth grade which may be summarized as follows: His experience on the junior high school football team caused him to think of himself as the star of the Chicago Bears' line, but he finds himself unable to make the high school football squad. This has caused him to lose many of his former little followers who refuse to listen to the braggings of a boy who was cut from the squad in the first week. Willie's parents want him to become a surgeon. Willie decides to "string along" with the idea because it gives him a sense of status which he lost when he was cut from the football squad although he has little real enthusiasm for the plan. He learns that in order to become a doctor he will have to get better grades in school. For several weeks he attempts the unaccustomed task of studying. Despite his better than average intelligence, he fails most of his courses at the end of the marking period because of a poor background. His response to this is to intensify his bragging, to pick fights with boys he is sure he can beat, and finally to run away from school. His outstandingly poor academic performance coupled with his other delinquencies brings him to the attention of the school principal, who sends him to the counselor.

Let us shift our attention now from Willie and his problems to the counselor and the ways in which he interacts with Willie in the counseling situation. Earlier we indicated that the effective counselor behaved in ways which could be described as secure, sensitive, and objective. We indicated, further, that effective counseling involved assisting the client to acquire new problem-solving behavior (symbolic at first but later objective) by using anxiety reduction as reinforcement in the learning process. We must, then, demonstrate some relationship between the counselor's security, sensitivity, and objectivity and the client's anxiety reduction.

Willie then comes in to see the counselor. "The principal says I should come see you," Willie explains. "He says you can tell me if I can be a doctor or not." The counselor's next remark will demonstrate whether or not he has the traits we consider essential.

If he is an insecure person who fears his limitations as a counselor he may say, "Well, I'll see what I can do about that," as a means of hiding his sense of inadequacy, hoping Willie will never find out that he can do very little. Or he may fall back on the professional counselor's patter and explain to Willie that no person can ever make such a decision for another. "After all, whether or not you become a doctor depends on you." Or he may see the princi-

pal's actions as a threat, remembering that he'd sent a whole series of "hopeless" cases during the past couple of weeks, and he may ask suspiciously, "What did the principal say when he sent you up here?"

If the counselor is an insensitive person and especially if he knows something of Willie's record he might say, "What makes you think you want to be a doctor?" or "Are you sure that's why the principal sent you to see me?" or "Suppose you tell me a little more about this whole thing."

If the counselor is limited in objectivity he might reply to Willie's opening statement with some such remark as, "Well, we can give you some tests and help you find out," or "The principal believes you'd make a good doctor," or "The principal wants you to find out about the field of medicine."

If, however, the counselor is sensitive to the situation and recognizes that the words used by Willie represent something other than what the words seem to say, and if he feels secure in his ability to deal with the basic situation no matter what it may turn out to be, he is likely to respond to Willie's attempt to state his problem in some such way as this: "The principal seems to think that things have come to the point where you need some help in finding out whether or not you're cut out to be a doctor. And you seem to think so too." Such a statement conveys to Willie the counselor's sensitivity to the problem, his acceptance of it, and his recognition that there is more to it than Willie's opening words convey. Such a statement should give Willie the feeling of confidence he needs to go on.

Such a statement further recognizes Willie's anxieties. These anxieties grow principally out of his problem, but also, in part, out of this new counseling situation in which he finds himself. A statement like the one suggested above should have the effect of reducing some of these tensions. If it does, we can expect Willie to respond again in a similar vein. As he is encouraged to talk about himself and as this self-disclosing behavior is reinforced by anxiety reduction, we can expect Willie to produce a considerable amount of symbolic behavior related to his problems.

A Danger in Counseling

Here then is where one of the dangers in counseling lies. The insecure counselor may project his own frailties into Willie's story and derive a feeling of release from Willie's ventilation of his troubles. It is a kind of second-hand catharsis. Or the insensitive counselor may encourage and support this public exposure of pain out of idle curiosity, or the non-objective counselor may believe that the symbolic solution of a problem is the same as the objective solution of it. But most of the trouble at this point comes from the insecure counselor whose sense of inadequacy requires that he receive continual reassurance of his worth. Willie's presence across the desk and the opening of his heart appear to the insecure counselor as evidence that he is needed and worthy. He will, therefore, do anything he can to retain Willie as a client. He will reassure him, and support him, and explore his psychological terrain to the point of no return, meanwhile reinforcing, as best he can, Willie's tendency to talk about himself. If the client's anxieties are partially reduced by this verbal behavior, he may learn, in the course of counseling, that anxieties and frustration can be reduced by talking about them. But if this is all he learns, and frequently this is all the insecure counselor can teach him, there is a good chance that irreparable damage may be done to his mental hygiene. This kind of counseling can, and unfortunately does, produce the chronic complainer, the chronic public explorer of his wounded psyche, the chronic listener-dependent.

At some point in Willie's counseling it may be necessary to secure more information about his potentialities for medicine than can be derived from his recital of his problems and experiences as he sees them or from the record. The possibility of securing some of this information from tests will be presented to Willie, and if he is like most clients he'll agree to testing. How does the counselor interpret these results?

If one of Willie's tests shows him to have an intelligence quotient of 115, how does the effective counselor interpret this to him-

self and to Willie? The counselor may say that Willie is smarter than the normal person. He may say that Willie stands an excellent chance of graduating from high school, a good chance of completing a college program, and a limited chance of earning a medical degree. Depending upon the counselor's own IQ, he may, if he is insecure, either pity or resent Willie, or he may just not believe the score. If the counselor is insensitive to Willie's kind of problem, he may tell him that he's just not working up to his capacity.

But how does the objective, secure, sensitive person interpret Willie's score? He views it first of all as an abstraction summarizing a variety of objective behavior. He recognizes that many emotional factors influenced the score at the time he took the test. For example: on the one hand, his level of anxiety probably tended to depress the score, while his desire to succeed at something—almost anything—probably inflated it. Meanwhile the score was also influenced by Willie's changeable, but as yet unchanged, general non-academic mode of behavior. Furthermore, the counselor knows that this test score is simply one indication of Willie's behavior repertory. These and other factors are kept in the forefront of the counselor's thinking as he interprets the score for Willie. He might say something like this: "This score on this test suggests that at the present time you're capable of learning slightly faster and slightly better than the average person, if you want to. You may not feel that the kind of learning skill this test measures is very important. In that case, you may not do well in school. If, however, you decide this is important, you could be expected to complete a medical program provided you were willing to put forth slightly more effort than the average student. You should know the more you learn the better you learn how to learn. This score is no final measure; it simply tells us where you stand now."

Expectations from Effective Counseling

Let us suppose Willie goes on with his counseling. What can we expect to happen to him? If the counselor is effective, we can expect Willie to learn to talk about ways of assuming responsibility. Between them, the counselor and client will find ways of translating this symbolic behavior into objective behavior. The effective counselor will indicate the kinds of immediate and remote satisfactions that Willie can look for in performing the behavior he has learned to talk about. If the counselor is sensitive, the sources of satisfaction and anxiety reduction will be in terms of Willie's own needs and value systems. If he is not, he will never communicate with Willie and he will become another counseling failure. If the counselor is secure, he will expect Willie to reject, and frequently with some violence, some of the counselor's interpretations and suggestions. He will understand that these rejections grow out of Willie's own experience and value system and he will not try to impose his own values on Willie as a means of justifying himself. The counselor will know that he has no direct pipeline to God through which he receives good advice to pass on to the little sinners in his charge. If the counselor is objective, he will help Willie find ways of translating his words into actions and he will help Willie learn the difference.

Willie may become a brain surgeon or the left tackle on the Chicago Bears. It doesn't really matter to the counselor, or to Willie, or to his parents either, in the long run. What matters is that Willie will learn through counseling a new way of attacking life's problems, and if the counselor is one of those very rare counselors, Willie will take away from the counseling experience some sense of security, objectivity, and sensitivity.

The devices, the techniques, the theories, and the like which make up the bag of counseling tricks are important to the effective counselor, yet this bag of tricks will produce no magic unless the magician knows his own personal skills and strives to improve them. If these traits of security, sensitivity, and objectivity do operate as we have tried to describe them (and this is, of course, testable) and if these traits are crucial in the counseling interaction, they need to be considered in the training of new counselors and in the self-examination and self-administered therapy of presently operating counselors.

The Holzinger-Crowder Uni-Factor Tests

NORMAN A. CROWDER

THE HOLZINGER-CROWDER UNI-FACTOR TESTS were developed in response to a requirement for a practical battery of modern, pure factor ability measures for the junior and senior high school age range. The tests are designed to serve all the purposes ordinarily served by conventional single score intelligence tests, as well as those purposes better served by having individual measures of the components or factors of the intelligence complex. The tests are based on extensive research by Professor Holzinger and his colleagues and associates during the period from 1932 to 1952 on the nature of the separable mental abilities. Those directly associated with Professor Holzinger's researches during this period included Spearman, Harmon, Harris and Miss Swineford, as well as the present author, who worked primarily on the preparation of the published battery. The tests furnish separate scores on four factors, Verbal, Spatial, Numerical, and Reasoning abilities, as well as a general scholastic aptitude score, if desired. The name, Uni-Factor Tests, derives from the method of factor analysis used in the developmental work, in which factor scores are obtained directly from selected summed test scores with negligible loss of accuracy over more complete regression methods.

Contents

The abilities measured may be suggested by the following brief description of the tests and factors, although, of course, inspection of the tests and the related data are required for a more complete understanding.

Verbal ability, V, is measured by Test 1, Word Meaning, and Test 2, Odd Words. In Test 1 the subject selects from choices the word or phrase most similar in meaning to a stimulus word presented in context. In Test 2 he identifies the one word in a set of three which is least related to the other two. In both tests the items are arranged in order of difficulty, and breadth and accuracy of vocabulary appears to be the primary variable, speed being of little importance. The factor measured seems to be the major contributor to the conventional single score intelligence tests (see TABLE 1) as well as the heaviest contributor to the prediction of academic success. It is, of course, probably the best known of all the intellectual abilities.

Spatial ability, S, is measured by Test 3, Boots, and Test 4, Hatchets. In these two tests, the subject must decide whether two pictured boots or hatchets are viewed from the same side or different sides. The figures in each pair are rotated in the plane of the page with respect to each other. All items are of approximately equal difficulty, and the ability measured is a fluency at this particular type of manipulation. The ability is very clearly distinguishable from other abilities, and seems quite specific to certain activities, such as mechanical drawing.

Numerical ability, N, is measured in Test 5, Mixed Arithmetic, and Test 6, Remainders. Test 5 consists of a series of problems involving the fundamental arithmetical operations with one or two place numbers.

NORMAN A. CROWDER is Research Psychologist with the Air Force Personnel and Training Research Center, Lowry Air Force Base, Denver, Colorado.

Fifth in a series of articles on Multi-Factor Tests

Test 6 is a series of simple short division problems in which the subject must indicate the remainder from the division only. The ability involved, then, is facility in easy numerical manipulations. Research has not supported the existence of an Arithmetical Reasoning factor as distinct from such numerical fluency plus one or more reasoning factors. For differential prediction work, therefore, the use of the purest measures of numerical fluency, as in Test 5 and 6, is indicated.

Reasoning ability, R, is measured by means of Test 7, Mixed Series, Test 8, Figure Changes, and Test 9, Teams. It is likely that more than one reasoning factor is represented in these tests. It was not considered feasible, however, to attempt a separation of several reasoning factors within the practical time limits involved, nor do the differential predictive validities of the tentatively identified separate components of "reasoning" justify such a time expenditure. Therefore, inductive and deductive tasks were deliberately mixed in these tests. Every effort was made, however, to exclude the effects of differing student abilities in the use of the specific media (verbal, spatial, or numerical) in which the reasoning problems were presented. For example, series tests in which the subject must deduce the next term of a series from a part that is given have always been very useful predictors for complex tasks. Such tests, however, usually show a substantial dependence on the Numerical ability just discussed. In the Mixed Series Test used in this battery, this dependence was minimized by using both numbers and letters in the series, and making sure that the arithmetic required remained very simple, although the logic of the series might be quite complex. Similar precautions were taken with Figure Changes, Test 8, which is a figure analogies test, and Test 9, Teams, which is a syllogistic reasoning test, with arbitrary but meaningful premises.

Administration and Scoring

Test materials consist of a reusable test booklet and two answer sheets, 1 and 2. Answer sheet 1 is a four-page booklet and is used for Tests 1 through 6, in the first testing period. Answer sheet 2, a single page, is used for the Reasoning Tests in the second testing period, and also contains the student record and profile form. The tests are designed to be administered conveniently in two forty-five minute periods. Two equivalent forms of the entire battery, Am and Bm are available.

All nine tests in the battery are in multiple choice form. In general the authors preferred to use short tests, with large numbers of short, independent items, both for the superior psychometric properties of such tests and for the better control of the testing situation which shorter tests permit. Much of the test format, of course, is determined by the nature of the abilities to be measured. In the tests for the Verbal and Reasoning factors, speed is not of much importance, since the subject ordinarily encounters an ability ceiling before he runs out of time. In the Spatial and Numerical factors, however, the ability involved seems to be primarily fluency in the simple operations. For these factors, then, highly speeded tests give the cleanest factorial separation as well as the best measurement properties. That it is fluency in the particular task, spatial or numerical, and not a general speed component that is involved, is attested to by the low intercorrelation of scores on the two factors.

In the development of the physical format of the tests, careful attention was given to minimizing possible clerical errors by the subject in using the separate answer sheet. In the Verbal and Reasoning Tests, except for Figure Changes, wherever an answer must be transferred from the test booklet to the answer sheet, the alternatives in successive items are identified differently (*i.e.*, the first item will have a, b, c, and d as alternatives, the second e, f, g, and h, etc.) on the answer sheet. Each test has practice items, which are answered on the answer sheet directly before the test items proper, and the answer spaces on the answer sheet are physically coordinated, row for row, with the items in the test booklet. In the speeded tests of the Spatial and Numerical factors the test items themselves are printed

directly on the answer sheet, so that no transfer is necessary and no possibility of clerical error exists.

The directions to be given the subject are furnished word for word in the examiner's manual. These directions were worked out in giving the tests to approximately five thousand subjects, in groups of twenty to four hundred at one time. The directions should be strictly adhered to, since they not only serve to inform the subjects of the test task, but also to pace the entire presentation, as required to standardize the testing situation. For example, sentences in the instructions to be given the subjects will be found to be repeated in certain places. This repetition represents our experience of how long it takes the subjects to perform the physical manipulations that are being requested in that part of the directions. When the directions are strictly adhered to, it will be found that each of the two test sessions is easily fitted into a forty-five minute class period with a comfortable margin of time to spare.

The tests may be scored either by machine or manually. The score on each test is the number right, except for the tests in which there are only two alternatives per item, which tests are scored right minus wrong. Negative scores on these tests were counted as zeroes in reporting the normative data. The scores for each factor are derived by simply adding the scores obtained on the tests of that factor.

Norms

The raw factor scores are converted directly to percentile ranks by the tables furnished in the test Manual. These tables are given for both-sex end-of-year testing for grades 7 through 12, and were obtained on a sample of approximately ten thousand subjects in thirty-eight school systems spread over seven states. Other normative tables obtainable from the publisher include total-group norms on an age, rather than grade, basis, separate-sex norms by grade, and total-group norms by grade for a Nov-Dec. testing date. The percentile ranks may be transferred directly to a student record and profile chart which is printed on the back of the second answer sheet. The profile chart, though marked in percentile ranks, is graduated so that equal distances on the chart represent equal standard score increments rather than equal percentile rank increments. Using the data given in the Manual, standard errors of measurement may also be represented as distances on the profile chart. For detailed guidance work, the separate percentile ranks as shown on the profile chart will ordinarily be used.

Provision has been made, and norms furnished, for a single score representing the average best predictor of academic success from a weighted sum of factor scores. The formula for this Scholastic Aptitude Score is $5V + N + 3R$, where the individual factor scores are in raw score form. The Manual furnishes both-sex end-of-year percentile rank norms for this score also, and a table showing the equivalence of such scores to the IQ derived from the Terman-McNemar Test of Mental Ability.

The Holzinger-Crowder battery has been used in experimental studies with young adults of average abilities, with satisfactory results [2]. The ceiling on the tests of the Verbal factor is presumably too low for use with a population of college students.

Standardization and Initial Validation

The relationships of each of the scores derived from the Holzinger-Crowder Tests to other intelligence tests may be seen in TABLE 1. For the last four tests given in the table, the values given represent median correlations obtained by combining correlations from several grades and communities, the number of cases ranging from 39 for the Otis Group Intelligence Scale to 1,196 for the Henmon-Nelson Tests of Mental Ability. The multiple correlation of the Holzinger-Crowder tests with six of the seven tests is given in the last column of the table. It may be noted that in each case the conventional single score IQ test shows its highest relationship with Verbal score, generally with Reasoning second, Number third, and Spatial of minor importance.

Alternate form reliabilities for all of the factor scores, and split-half reliabilities by the application of the Spearman-Brown

TABLE 1

Correlations between Holzinger-Crowder Factor Scores and Results on Seven Intelligence Tests*

Test	N	Holzinger-Crowder Factor Scores				Multiple R
		V	S	N	R	
ACE†	180	0.80	0.33	0.46	0.63	0.857
California‡	299	0.69	0.19	0.36	0.46	0.709
Otis Group	39	0.81	0.58	0.67	0.72	..
Henmon-Nelson§	1196	0.74	0.35	0.61	0.60	0.821
Otis Beta§	364	0.79	0.41	0.55	0.66	0.838
Otis Gamma§	649	0.71	0.41	0.57	0.68	0.815
Terman-McNemar§	823	0.83	0.33	0.40	0.58	0.839

* Condensed from the Holzinger-Crowder Uni-Factor Test Manual.
† American Council on Education Psychological Examination for High School Students.
‡ California Short-Form Test of Mental Maturity.
§ Median correlations from several community and grade samples.

formula for the Verbal and Reasoning scores are shown in TABLE 2. The split-half reliabilities are not appropriate for the speeded tests of the Spatial and Numerical factors. The figures given in TABLE 2 are averages over several grades and communities, and for the alternate form reliabilities, for the administration of form Am followed by form Bm, and vice versa. A complete table of the reliability data by grade and community is given in the test Manual. There is no systematic trend visible in the variation of reliabilities over grades except for a slight increase in the split-half reliability of the Verbal score (from 0.883 in grade 7 to 0.951 in grade 12) as the grade level is taken higher. This is not surprising, as the Verbal tests, being graduated in difficulty, contain more effective items when used in the higher grades, and is thus, in effect, a longer test.

TABLE 2

Reliability Data for Holzinger-Crowder Factor Scores*

Factor Score	N	Alternate Form Reliability†
V	463	0.863
S	463	0.837
N	376	0.909
R	376	0.827
		Split-Half Reliability‡
V	1244	0.931
R	1244	0.933

* Condensed from Holzinger-Crowder Uni-Factor Test Manual.
† Weighted average for grades 7, 9, and 11, and for form Am followed by form Bm and vice versa, individual N's ranging from 41 to 112.
‡ Form Am only, weighted averages for grades 7 through 12, individual N's ranging from 101 to 320. Calculated by the Spearman-Brown formula.

Standard errors of measurement of factor scores both in raw score and in standard deviation units are given in the test Manual. The medians of the figures for the latter for forms Am and Bm, over grades 7, 9, and 11 are 0.36σ for the V score, 0.41σ for S, 0.31σ for N and 0.43σ for the R score. The test Manual contains instructions for interpreting these standard errors of measurement in terms of distances on the student profile chart.

Validity

As part of the test standardization program a number of standard achievement tests such as Iowa Language Abilities, Read General Science, etc., were also administered to the standardization population, and teachers' marks were also collected. These data are summarized in TABLE 3, and are reported in more detail by Mitchell [1] and by individual course and community in the test Manual. These data represent primarily concurrent validities, as the tests were administered and the criterion data collected usually within a four to six week period, although in some cases there was an intervening period of two years. TABLE 4, taken from Mitchell [1] gives beta weights and multiple correlation coefficients for predicting certain of the standard achieve-

TABLE 3

Median Correlations by Area between Holzinger-Crowder Factor Scores and Achievement Measures*

Subject Matter Area	Achievement Measure	Number of r's	Median r			
			V	S	N	R
Mathematics	Tests	14	0.51	0.35	0.53	0.60
	Teacher Marks	4	0.49	0.29	0.42	0.49
Science	Tests	8	0.62	0.33	0.33	0.52
	Teacher Marks	5	0.57	0.34	0.46	0.55
Social Studies	Tests	6	0.64	0.25	0.35	0.44
	Teacher Marks	4	0.65	0.20	0.48	0.47
English, Reading	Tests	8	0.73	0.28	0.47	0.56
	Teacher Marks	5	0.57	0.19	0.46	0.46
Foreign Language	Tests					
	Teacher Marks	6	0.41	0.20	0.48	0.36
Vocational, Manual	Tests	4	0.69	0.45	0.54	0.45
	Teacher Marks	22	0.29	0.22	0.30	0.31
All Academic Subjects	Tests	36	0.62	0.33	0.44	0.52
	Teacher Marks	24	0.57	0.22	0.46	0.48

* Quoted from Holzinger-Crowder Uni-Factor Test Manual.

TABLE 4

Multiple Correlation Coefficients and Beta Weights for Composite Predictors*

Achievement Test	N	Holzinger-Crowder Uni-Factor Tests — Beta Weights for Factors				R
		Verbal	Spatial	Numerical	Reasoning	
Lankton First-Year Algebra	302	0.152	...	0.119	0.271	0.658
Snader General Mathematics	303	0.092	0.070	0.233	0.241	0.781
Shaycoft Plane Geometry	231	0.186	0.049	0.047	0.166	0.518
EHSCB-Mathematics	180	0.234	0.052	0.236	0.248	0.723
Read General Science	173	0.330	0.019	0.077	0.201	0.689
Nelson Biology	197	0.430	0.062	0.060	0.101	0.673
EHSCB-Science	180	0.742	0.024	0.057	0.137	0.771
Crary American History	240	0.416	0.029	0.016	0.070	0.622
EHSCB-Social Studies	180	0.434	0.005	0.126	0.082	0.620
EHSCB-English	180	0.689	0.032	0.089	0.116	0.780

* Data from Mitchell [1].

ment test scores from the four factor scores. The differences in the pattern of beta weights for predicting the mathematics tests as contrasted with, say, those for predicting the Essential High School Content Battery-English score is particularly striking. It may be noted that generally the Spatial score does not contribute significantly to the predictions, and, in fact, is not used in computing the Scholastic Aptitude Score. The score is not without its specific usefulness, however. For example, in a sample of 141 cases in a Mechanical Drawing class, using teacher marks as the criterion, the pattern of correlation coefficients was V, 0.40; S, 0.45; N, 0.37; and R, 0.45. This result is particularly striking if one considers the multitude of variables influencing teacher's marks in mechanical drawing, including neatness, etc., which presumably is little influenced by the Spatial factor. Specific results of this sort, used in guidance, may help to explain why a particular student, with a generally excellent record, may be

completely unable to grasp certain types of concepts, as in drafting.

The differential predictive usefulness of batteries furnishing more than one score depends to a great extent on the relationship between the several scores obtained. While the abilities measured by the separate factors are distinct abilities, they are not uncorrelated in the general population. TABLE 5 shows the median of the inter-

TABLE 5

Median Intercorrelations of Holzinger-Crowder Uni-Factor Scores for 36 Single-Grade Groups, (N's from 51 to 303), Alternate Form Reliabilities in the Diagonal*

Factor Score	*V*	*S*	*N*	*R*
V	(0.86)	0.31	0.48	0.53
S	0.31	(0.84)	0.34	0.45
N	0.48	0.34	(0.91)	0.52
R	0.53	0.45	0.52	(0.83)

* Data condensed from the Holzinger-Crowder Uni-Factor Test Manual.

factor score correlations for 36 single grade groups, with N's ranging from 51 to 303. The entries in the diagonals of the table are the alternate-form reliability coefficients from TABLE 2. In interpreting this table the reader should have in mind the properties of correlation coefficients and the fact that actually the coefficient of determination, r^2, rather than r, is the appropriate figure to consider in quantitatively judging the amount of overlap between scores. On such a basis, for example, the verbal score has 74 per cent reliable variance, ($0.86^2 = 0.7396$) of which 10 per cent is common also to the Spatial score, and 28 per cent common to the Reasoning score.

As has been suggested previously, clean factorial separation of the abilities measured by the battery was the primary concern of the authors. This article is not the place to recount the developmental work, but it is appropriate to say that of the many experimental tests that were discarded, the commonest reason for rejection was that the test did not show on analysis a clean factorial pattern. A single example of how difficult it is to predict *a priori* the factorial content of a test may be of interest however. In deciding on stimulus objects for the Spatial tests (where boots and hatchets were finally used) a number of such stimulus objects were tried. Professor Holzinger suggested that we try single block letters, where the subject task would be to indicate whether the letter was printed correctly or backward (*i.e.*, a mirror image). The letters would, of course, be rotated in the plane of the page, as are the boots and the hatchets in the present tests. This seemed like a very good idea, since the stimulus object was familiar, the directions would be easy to give, and we would also need only one stimulus object per test item, rather than the pairs of stimulus items used in the boots and hatchets tests. We could therefore have twice as many items on a single page of the answer sheet. When we tried the test experimentally, however, it persistently showed a substantial loading on the Verbal factor as well as on the Space factor. This presumably was due simply to the use of a letter as the stimulus object.

In summary the Holzinger-Crowder Uni-Factor Tests are an ability battery for guidance purposes for the junior and senior high school age range, offering scores on four aspects of mental ability, Verbal, Spatial, Numerical, and Reasoning. To the author's mind the significant features of the battery are, from a technical viewpoint, (a) clean separation of the factors measured; (b) the use of short tests with large numbers of independent items; (c) adequate reliability and validity for differential prediction; and from the practical viewpoint, (a) very careful "human engineering" of the test materials and directions to minimize examinee clerical errors and to standardize the testing situation; (b) a format designed to fit easily into two separate 45 minute testing periods; (c) norms and percentile rank conversion tables for both separate factor scores and a composite Scholastic Aptitude Score, based on grade or age, as desired, with convenient recording and profile charts as a part of the answer sheets.

References

1. Mitchell, Blythe C. The relation of high school achievement to the abilities measured by the Holzinger-Crowder Uni-Factor Tests. *Educ. psychol. Measmt.*, 1955, 15, No. 4, 487–490.
2. Crowder, N. A., Morrison, E. J., & Demaree, R. G. Proficiency of Q-24 radar mechanics: VI. Analysis of intercorrelations of measures. Lackland Air Force Base, Tex.: Air Force Personnel and Training Research Center, December 1954. *Research Bulletin* (AFPTRC-TR-54-127).

COMMENTS

THE ARTICLE on the Holzinger-Crowder tests deals in considerable detail with the rationale, content, and mechanics (administration, scoring, etc.) of the battery. In fact, about one-half of the article is devoted to these topics. The balance of the paper takes up norms, reliability, validity, and factorial purity, about one-sixth of the article dealing with validity.

This emphasis on topics other than validity is not because of any apparent desire to play down that topic, but apparently is a function of the type of data collected and the types of analyses made so far by the test authors and their students. As is so often true of multi-factor tests, energy and money have gone into developing as pure a battery of tests as possible: reliability, norming, and validity get lower priorities, in the order named.

It is pertinent to ask ourselves, then, how good a battery of tests is this, as a factorial battery and as a predictive battery. The answer concerning the battery as a measuring device for factors appears to be that the authors have been rather successful: their factor scores are about as independent as are those in other such batteries, the intercorrelations ranging from 0.31 to 0.53. While these figures hardly seem to justify the statement that a "clean separation of factors measured" has been achieved, the separation is as good as has so far been achieved. Since the authors concentrated on four factors which have stood out rather clearly in other studies, and included no measures of dubious factors such as appear in some other batteries for practical predictive purposes, the results are not surprising.

Crowder tells us that the battery was standardized in 38 school systems in 7 states, the norm group being about 10,000 in number. For a first norming (Manual published in 1955) this is good, especially since the manual shows that there are at least 800 in each grade group. But we are not told where the seven states are located, and if they are largely in one region the norms are not appropriate for other regions. The reliability figures are good, and the types of reliability computed are appropriate.

The validity data are sparse, as indicated by the amount of space devoted to them, but they are somewhat encouraging in quality. TABLES 3 and 4 show that the Uni-Factor Tests are a rather good intelligence test: singly and combined they correlate rather well with grades and achievement tests. These tables and TABLE 5 also show that, taken singly, they have some differential predictive value for scholastic achievement. The Verbal Test is the best predictor of achievement in Social Studies and in English; the Reasoning Test is the best for Mathematics; these two tests are about equally good for achievement in Science. This is as one would anticipate. If other studies confirm these findings, this will be a better record than that made by some of the other factorial batteries. But more such data are needed, and experience with other batteries makes caution necessary.

Examination of the Specimen Set brings out a few additional points. The set includes only one of the five scoring stencils, which is frustrating if one wants really to study the specimen. The advertising material on the set claims that the four aspects of mental ability are "of particular significance in educational and vocational guidance," but the validity data do not as yet warrant such a statement. The tests can be "teacher administered," but there seems to be no recognition of the fact that the

teacher, nose in manual, will be reading long and complex directions, with the result that he will need proctors to check the degree to which students are actually following them (the "human engineering" of the tests is not as good as Crowder suggests). The manual is, as claimed, more complete than many new test manuals have been.

In summary, the *Holzinger-Crowder Uni-Factor Tests* appear to be a technically sound and rather conservatively built battery of multi-factor tests, heavily oriented toward factorial purity. They are probably as easily used as other batteries, despite the lengthy directions. It is still too early to draw any conclusions concerning their validity, but preliminary results look promising for school achievement. Since the battery is frankly a measure of mental ability, its use in predicting school achievement is the most important. One may make inferences concerning its probable occupational significance, since it is a battery measuring mental ability, but it is important to recognize that, until occupational norms and correlations with occupational success criteria are made available for these tests, any use to which they are put in vocational counseling is purely inferential.—DONALD E. SUPER

INTERIM REPORT ON EDUCATION BEYOND THE HIGH SCHOOL

The President's Committee on Education Beyond the High School in November made its first interim report to President Eisenhower giving the group's tentative conclusions on the need for various types of post high school education, and some tentative suggestions on how this need can be met. Since these conclusions will be the basis for the Committee's final recommendations for action to the President, the group wants them examined and criticized by interested lay people and educators before they are put into final form.

1. Our ideals and the increasing complexity of our civilization require that each individual develop his or her talents to the fullest.

2. The needs of the individual and of society plus an unprecedented growth in the population of post-high school age will far outrun the present or planned capacity of existing colleges and universities and other post-high school institutions.

3. The needs of the oncoming millions of individuals with varying capacities and interests will call for a broader range of educational opportunities, and less rigid time requirements.

4. Many more able and qualified teachers will be needed than present efforts can provide.

5. There must be promptly formulated an explicit, considered policy as to the role of the Federal Government in education beyond the high school.

6. Even with the best possible utilization of existing resources, additional financial support must be provided if the additional millions in the population are to be enabled to develop their talents to the fullest.

The American Personnel and Guidance Association has been represented on the Committee by the Executive Secretary, Arthur A. Hitchcock. At his suggestion the Committee added an explanatory paragraph to its first conclusion stating the role of guidance in helping students to recognize and develop their individual talents.

Values and Disvalues of Faculty-Student Committees

HERBERT STROUP

THE 1955 STUDY by the United States National Student Association on *Student Government, Student Leaders and the American College* reviewed among other topics the operation of faculty-student committees in American colleges [2]. All of the findings of this Ford Foundation supported project are enlightening, despite the non-valuative orientation of the total effort, and undoubtedly will receive the attention of students, faculty, and administrators in many colleges. Especially of interest in the present consideration is the variety of opinion reflected on the theme of faculty-student committees. This opinion suggests that the time is perhaps ripe for a reexamination of the values and disvalues of such committees.[1] The extent to which criticisms of the commonly accepted fact of faculty-student committees were expressed in the Association's research gives a fresh opportunity to consider certain of the pros and cons.

Disvalues

As I see them, the disvalues connected with student participation on what otherwise would be faculty committees are several. They will be listed and commented upon briefly.

1. *Discontinuity:* The college's chief responsibility is to see to it that a complex organization of educational and other services is maintained for the benefit of the students. These services require a high measure of "time-binding" in order to be effective. The commonly recognized fact in educational administration is that the faculty and the administration of a college possess a relatively high degree of stability and permanency while the student body is ever changing. On the other hand, student representatives to faculty-student committees change oftentimes every year; some even each term (taking graduation, leaves, elections, and such factors into account). Faculty-student committees find that repeatedly they have discussed long and deeply certain problems within their provinces only to have a change in student membership raise the same problems, requiring repetitive discussion and decision [1]. This may be institutionally wasteful.

2. *Incompetency:* It is assumed that a committee, in order to be truly effective, holds some degree of competency for the responsibility which is given it. To place persons of low competency upon a responsible committee is to nullify the committee's function. So it may be that students generally do not possess sufficient knowledge and understanding to be granted positions on committees for which the faculty (in terms of educational or even legal responsibility) should be held accountable. For example, a committee on evaluation, concerned with research methods and programs within an institution, should not have student members, not because students are not liked, but because they lack the proper qualifications for service. May not the same claim be made, more or less, with such problems as admissions, honorary degrees, finances, legislation, and graduation requirements?

3. *Immaturity:* Committee work which regularly requires the participation of faculty members usually calls for the ability of the members to arrive at mature decisions concerning the various groups within the college as well as among colleges and in the

HERBERT STROUP is Dean of Students at Brooklyn College, Brooklyn, New York.

[1] The late Professor Edgar S. Brightman of Boston University introduced the term "disvalue" into serious discussion. He wished it to be apposed to "value."

community. The administrator who spends the greater part of his time with the complexities of institutional organization, with the problems related to associations of colleges and professional groups, and with the community often feels that considerable experience as well as intellectual prowess and good will are required for successful management. Oftentimes the administrator feels that even the faculty does not fully appreciate the complexities of some academic situations. How then is it possible that students, young, immature and lacking in responsible experience should be able to share in the making of mature decisions affecting the totality of the institution or some significant part of it? Are not students lacking in the very quality for which they are being educated and for which the college at its best stands—mature responsibility?

4. *Limited Time of Students:* The Association's study interestingly relates that one administrator suggested that students not serve on institutional committees because "it is the duty of the administration to do as much as it can for the student so that he is not overburdened by extracurricular chores" [2, pp. 47–48]. The presumption, of course, in this comment is that the classroom responsibilities of the student are not only primary in importance in securing a college education, but of such significance as to call for the curtailment of serious demand upon the student's time in "extracurricular chores."

5. *Lack of authority:* For most American colleges the clear responsibility for the operation and development of a college is imposed by law upon a board of trustees, an administration, and a faculty. The degree of responsibility granted to each varies from college to college and there is an observable difference between theory and practice. Yet, in the main, student bodies are not given technical responsibility for administration. The presence of students on institutional committees in which students finally have no legal duty may compromise the task and function of those who hold responsibility. It also may give students a false conception of the administrative distinctions common to colleges as well as all organizations of any size in the community. If it is true, as the Association's report states, that student governments are interested in the "improvement and expansion of function for the sake of the effort of improvement and expansion" and with no clear conception of institutional limitations upon function, then it may be that to encourage faculty-student committees, especially in areas where students hold no legal duty or professional responsibility, is to encourage a sort of collegiate demagoguery [2, p. 39].

6. *Power-mindedness:* In some instances students have tenaciously held to an exact and mathematical conception of democracy in connection with faculty-student committees. They have wished to be equally represented on faculty-student committees. In a few colleges students do possess equal representation on some committees. But whether or not such relations with the faculty exist, there can be detected in the attitudes and actions of some students (either individually, in groups or through student governments) a concern with their own legally undefined or denied status. They speak in moments of emotion as though they were employees of the college with the contractual privileges of employees in the industrial world. Or, they speak in some moments as though they were in a situation roughly comparable to that of the citizen in the general political community. Both concepts are sadly inadequate and fallacious. Not even the faculty in most instances may be considered as employees of a college (witness the ambiguities that so-called academic freedom and the tenure laws raise on this point). Certainly the college is everywhere recognized legally as *in loco parentis* so far as students are concerned rather than as an employer. As for the "political student," the Association's report admirably perceives: "in the political community, anyone who is twenty-one has the right to participate in determining the way the community is run, but the college is a bureaucratic organization, an institution rather than a political community, and in the college the student is not only in the sociological position of a client, but as well is in the legal position of a child [2, p. 48].

Values

The values of student participation upon institutional committees have been elaborated on many occasions and especially in the recent years. By and large these values may all be subsumed under the general heading of "educational," although a more discriminate analysis may prove to be fruitful.

1. *Educational benefits:* Educational values (taken narrowly) in student participation on college committees include personal and citizenship factors or goals.

The personal aspect of the general educational goal has been variously formulated. Briefly, it signifies the growth and enhancement of individual personality. Thus, the student who participates in as wide a range of educational experiences as possible may be said to be growing personally. He is enhancing his personality. His membership on institutional committees, therefore, is educational because it contributes to his personal development. It provides him with experiences in one or more phases of institutional management and thus strengthens his sense of security or his need for belongingness.

In terms of citizenship, participation on institutional committees aims at developing the social leadership potential of the student. It is assumed that college leadership is positively related to later leadership in the community. Community leadership may be expressed not only professionally in terms of acknowledged professional competence for law, medicine, religion, teaching, etc. It also connotes the leadership of the citizen as citizen in the manifold activities of the community as it seeks its own improvement. So far as student participation on college committees is concerned, it is hoped that the student will learn how to be a leader not only by participating in student activities groups with his fellow students but also by sharing responsibility with intelligent and concerned adults. It is believed that the student is called upon for the full exercise of his knowledge and skill in faculty relations and in connection with serious problems. So, for the young to be in association with adults in college committees is similar to the situation of the child who learns how to be adult through association and sharing with his parents.

2. *Indispensability:* In addition to the educational values achievable through membership on college committees, it is thought by many that the sharing with students of responsibility in certain areas is indispensable for the successful operation of the college. The prime examples here are those activities which are fundamentally a concern directly of the students themselves, such as student activities. On this point the claim is made that no one knows better than the students what they wish to do and how they wish to achieve their own purposes. One can't legislate a [successful and] pleasurable party, it is said. Obviously on this score there is much to be said for active student participation and even control of certain features of their own activities. In such matters the faculty appear to be "elder statesmen" or friendly advisers rather than persons who hold legal responsibility for a particular enterprise. On those committees which regulate these activities it may be desirable not only for the students to have equal representation but even a predominance of the membership. Here the argument of technical incompetence does not hold, since the students quite often are more skilled than the faculty.

3. *Institutional Morale:* The participation of students on college committees may help to develop an awareness on the part of the students of the "realities" and perplexities of the total life of the institution. Sometimes students are impatient with certain aspects of the curriculum or administration of a college. They may discover through their representatives, who have a chance to work closely with faculty members on these problems, that at least "there is more than one point of view." Thus, under certain controls, it may be wise for a college to permit its student newspapers to "sit in" on some faculty and faculty-student committees in order that the faculty's genuine concern for the betterment of the college may filter through the newspaper to the students at large. It is obvious (and the Association's study supports this view) that

on many campuses there is an antagonistic chasm existing between the students on one hand and the faculty and administration on the other. This chasm probably broadens (and deepens) unless there are unrelenting efforts to build bridges of understanding if not of agreement between the young and their elders. Student membership on college committees provides one bridge of understanding.

Thus, despite serious limitations, the participation of students on faculty-student committees in specific areas and under carefully defined limitations seems to be not only permissible and advisable but even necessary and desirable.

References

1. Coulton, Thomas Evans. *A city college in action: Struggle and achievement at Brooklyn College: 1930–1955.* New York: Harper, 1955.
2. Freidson, Eliot (Ed.) *Student government, student leaders and the American college.* New York: U. S. National Student Association, 1955.

THE COUNSELOR'S ROLE IN DISCIPLINE

Good discipline is closely related to the total guidance program. The goals of both are to help students achieve self-direction and to change misbehavior into socially acceptable conduct. When discipline is perceived only as punishment, the way the student feels about his problem is overlooked. Counseling can lead to an understanding on the student's part of his own hard-to-handle feelings and to a more acceptable means of dealing with them.

This similarity of purpose, however, does not mean that the counselor himself should be the disciplinarian. Educators generally agree that he should not be directly responsible for administering disciplinary measures, but should serve as a "consultant" to the disciplinarian. Cases of misbehavior should be referred to him for counseling, and the counselor should interpret the school's discipline policies to the student, helping him to understand and accept the necessity for such policies.

Lyle M. Spencer, director of Science Research Associates, suggests that schools can:

Formulate a definite policy in cooperation with teacher representatives, establishing necessary rules and spelling out the teacher's responsibility and the role of the counselor. Provide in-service training for teachers on why children misbehave, identifying potential discipline problems, and techniques of discipline. Use case conferences and other techniques helpful in identifying potential trouble-makers. Provide adequate counseling for these cases, emphasizing prevention rather than punishment. Set up adequate cumulative records that include data on social, economic, and home background as well as school progress and behavior. Review the curriculum. Students are less likely to be discipline problems if they can follow a meaningful course of study that is fitted to their needs and abilities. As far as possible, make provision for grouping slow-learning and academically retarded pupils and for controlling class size. Utilize the student government in preventing discipline problems. This group might develop and distribute a student handbook to explain rules and traditions to new students. Use the PTA as a preventive agency. Parents can be effective in molding good behavior in school dress or reasonable hours for ending school functions.—*SRA Guidance Newsletter,* November, 1956.

Student Leadership in a Program of Co-Curricular Activities

ELIZABETH A. GREENLEAF

A MAJOR PURPOSE of an activities program on any university or college campus is to give an opportunity for as many students as possible to develop those traits of leadership and citizenship which will assist them in assuming positions of responsibility in their future communities and business groups. In this period of rapidly expanding enrollment, student personnel administrators are confronted with the problem of how best to spread leadership experiences as gained in co-curricular activities among a larger proportion of the student population.

At present many schools limit participation in co-curricular activities by grade requirements, by setting up a point system, by a limitation of major or minor offices or other similar devices. These methods lead to additional clerical work, checking of grades, reporting of officers and individual record keeping. When the personnel staff becomes involved with these types of "red tape," less time is available for individual counseling with student leaders. But more important, there is less and less time available to provide those additional leadership training experiences which are valuable to the students, to organizations, and to the school as a whole.

This study investigates the activity participation and the scholastic achievement of student leaders on a campus where there were few limitations on participation in co-curricular activities.

Enrollment at Southern Illinois University has increased over 52 per cent in a two year period and approximately 80 per cent over the three year period covered by this study. A few campus organizations voluntarily set their own limitations for officers, and one university regulation requires those holding positions secured by all-campus elections to have a "C" average. However, for the three years covered by the study there was a conscious effort through individual counseling to spread activities participation and to limit over-participation by a minority of students.

What per cent of the student body has an opportunity to assume leadership roles? Do students find themselves in leadership positions too early in their college careers? Do women students have a proportionate share of leadership positions? What per cent of the student leaders hold multiple positions? Since there were few restrictions against holding office without a "C" average, what grade point averages were made by student leaders? What proportion of the student leaders were on probation? What happens to the grades of those students on probation and holding offices? These questions served as a starting point for investigation.

For purposes of the study student leaders were defined as those holding offices in any recognized campus organization, holding the chairmanship of any all-campus committee or serving as a member of a major

ELIZABETH A. GREENLEAF is Director of Student Activities at Southern Illinois University, Carbondale, Illinois. Data summarized here were from a study, "Student Participation in Activities without Limitation," approved by the Graduate Council of Southern Illinois University.

A study of activity participation and scholastic achievement

TABLE 1

Distribution of Leadership Positions Among the Student Body by Terms

	1952–1953			1953–1954			1954–1955		
	Fall	*Winter*	*Spring*	*Fall*	*Winter*	*Spring*	*Fall*	*Winter*	*Spring*
Number of students	265	254	241	307	292	302	361	358	357
Total enrollment	2685	2232	2045	3162	3028	3007	4159	3965	3959
Percentage	9.79	11.83	11.30	9.71	9.66	10.04	8.68	9.03	9.02

campus governing group. When interpreting TABLE 1, a comparison of corresponding terms of the three year period indicates there has been a steady increase in the number of student leaders, but, although rather slight, there has been a constant decrease in the percentage of the students assuming leadership positions. The decreasing percentage could be the result of the rapidly increasing enrollment, or, since there were no limitations on the number of offices a person could hold, could be due to an increasing number of students holding multiple responsibilities.

The Director of Student Activities, aware of two individuals who in the Spring of 1953 held eight and nine offices, and of the "same people doing all the work," made every effort through counseling to limit the responsibilities held by any one individual. In the hope of securing interests of students not already holding offices, petitions were made available for students to apply for leadership positions on all-campus committees.

TABLE 2 indicates these methods may have had some effect. The peak of multiple participation was in the Spring of 1953 when 47 per cent of the student leaders held two or more positions at one time. After the first year, there was only one term when any individual held more than five responsibilities, and the total per cent of student leaders holding multiple responsibilities appears to have gradually decreased to 28 per cent.

If the percentage of the student population holding leadership responsibilities in activities is to increase as enrollments increase, either new organizations will need to come into being on campus or there must be a reduction in the proportion of students holding multiple positions. During the period of this study 27 new organizations were given university recognition (3 in 1952–1953; 12 in 1953–1954; 12 in 1954–1955). At the same time 4 groups disbanded, thus making a total increase of 23 groups. The increase in organizations, however, was not sufficient, in light of the increasing enrollment, to increase the per cent of students having leadership opportunities.

At the same time, although there was a decrease in percentage of student leaders holding multiple positions, it apparently did not increase the total per cent of the student body holding leadership positions.

It appeared during this three year period, that not only were a few students carrying most responsibilities, but that most of the offices were held by students of sophomore standing. When data were collected for a two year period (TABLE 3), it was apparent that a large number of offices were held by sophomores, but over 50 per cent of all offices were held by either juniors or seniors. No attempt was made in this study to classify major and minor offices. If the sophomore positions were minor in nature, these data would indicate that the over-all division of responsibilities was good, for there were leadership positions assumed by students in each classification.

Frequently it is observed that the majority of the positions on a co-educational campus are held by men, and the assumption is made that women lack the opportunity to assume leadership responsibilities. However, this situation did not exist on Southern's campus. Each year from 48 to 53 per cent of the student leaders were women. When the University enrollment is approximately two men for each woman, this per-

centage would indicate that the women students have secured more than their share of offices.

A common limitation on the participation of students in activities found on many campuses and missing at Southern is the limiting factor of grades. TABLE 4 indicates grade point averages earned by student leaders at the time they were holding offices. During each of the terms the grade point averages of student leaders were above that of the all-university grade point average. It was also found that the percentage of student leaders achieving below a "C" average varied from 12 to 19 per cent, while those above a "B" average varied from 35 to 44 per cent. Investigation of grade averages of those student leaders holding multiple positions indicated there was a lack of relationship between the number of positions held and the grade point averages achieved.

When a school does not require a "C" average in order to participate in activities, it may restrict those students on probation from holding offices. Even this latter situation did not exist at Southern. From 3 to 9 per cent of all the student leaders were on probation at the time they held offices. In order to get off probation status one must maintain better than a "C" average. With the exception of two terms a majority of student leaders on probation maintained a "C" average or better. However, the number failing to achieve a "C" average was still proportionally high (TABLE 5).

As indicated earlier, a "C" average was required for offices elected by an all-campus election. The question arose as to what types of organizations tended to have the largest number of officers failing to achieve a "C" average. Apparently, according to data in TABLE 6, the two groups with the largest number of leaders failing to maintain a "C" average were the governing groups, including class officers, student council and residence halls councils, and social groups including sororities, fraternities, and the Independent Student Association. Since the majority of governing groups were selected at all-campus elections, it is interesting to note the large number

TABLE 2

Number and Percentage of Student Leaders Holding Multiple Responsibilities

Responsibilities	*1952–1953*						*1953–1954*						*1954–1955*					
	Fall		*Winter*		*Spring*		*Fall*		*Winter*		*Spring*		*Fall*		*Winter*		*Spring*	
	No.	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*
2	65	75	61	69	67	59	56	63	64	74	61	69	71	68	76	75	63	62
3	15	17	21	24	33	29	23	26	17	20	19	22	20	19	14	14	26	26
4	3	3	3	3	6	5	6	7	4	5	4	5	11	11	9	9	8	8
5					3	3	4	5	1	1	4	5	2	2	3	3	2	2
6	3	3	2	2													2	2
7	1	1	2	2	2	2												
8					1	1												
9					1	1												
Total number	87		89		113		89		86		88		104		102		101	
Percentage of all student leaders		33		35		47		29		29		29		29		28		28

TABLE 3

Distribution of Student Leaders by Classes

Class	1952–1953		1953–1954		1954–1955	
	Number	*Percentage*	*Number*	*Percentage*	*Number*	*Percentage*
Freshman	29	10.91	44	13.54	48	12.56
Sophomore	83	31.20	71	21.85	105	27.51
Junior	89	33.46	112	34.46	121	31.67
Senior	65	24.43	98	30.15	108	28.26

TABLE 4

Comparison of Total Grade Point Averages of Student Leaders with Total University Grade Point Average*

	1952–1953			1953–1954			1954–1955		
	Fall	*Winter*	*Spring*	*Fall*	*Winter*	*Spring*	*Fall*	*Winter*	*Spring*
Student leaders	3.83	3.74	3.74	3.63	3.51	3.72	3.59	3.75	3.76
Total university	3.31	3.26	3.42	3.28	3.38	3.42	3.29	3.33	3.34
Difference	+0.52	+0.48	+0.32	+0.35	+0.14	+0.30	+0.30	+0.42	+0.32

* 3.00 = C.

TABLE 5

Scholastic Achievement of Student Leaders on Probation

	1952–1953			1953–1954			1954–1955		
	Fall	*Winter*	*Spring*	*Fall*	*Winter*	*Spring*	*Fall*	*Winter*	*Spring*
No. below "C"	4	5	9	6	12	10	9	13	13
No. above "C"	7	8	6	3	10	14	10	12	10
"C"	4	2	1	..	5	2	5	3	5
Withdrew	..	1	..	..	..	..	..	1	..
Total student leaders on probation	15	16	16	9	27	26	24	29	28
Percent of student leaders on probation	6	6	7	3	9	9	7	8	8

in that group failing to achieve a 3.00 ("C") average during the time they were holding positions. However, all groups tended to have some leaders not maintaining a "C" average.

If Southern Illinois University is typical of other universities with a rapidly increasing enrollment, the following trends seem to be indicated by this study:

1. As enrollments increase, the number of students holding responsibilities of a leadership character may increase, but the percentage of the total student population holding such positions decreases.
2. Even though recognition is given to new organizations, it may not bring about an increase in the per cent of total students holding leadership positions.
3. Through counseling it is possible to limit the over participation of a few individuals and to spread out participation; thus avoiding the "red tape" of regulations and providing a means of increasing the number of students assuming leadership responsibilities.
4. A majority of leadership positions may go to Juniors and Seniors without applying any unnecessary limitations.

TABLE 6

Number of Student Leaders Failing to Maintain "C" Average Classified by Organizational Groups

Group	1953–1954			1954–1955		
	Fall	*Winter*	*Spring*	*Fall*	*Winter*	*Spring*
Social	16	14	13	14	8	4
Departmental	10	11	9	13	7	3
Special interest	11	3	5	13	6	7
Governing	16	5	9	22	14	16
Religious	6	4	3	8	8	3
All-campus events	9	6	8	4	2	6

5. Women in a co-educational school may acquire their share of leadership positions.
6. Student leaders on the whole tend to make above average grades. Having a "C" average before selection is no indication that a student will maintain that average. The number of positions held seems to have no negative effect on grades.
7. A large proportion of those student leaders on probation failed to maintain a "C" average. This would indicate that there should be more counseling with those students on probation and that participation in leadership positions should be kept to a minimum.

Since the completion of this study, two regulations applying to all recognized campus organizations have gone into effect at Southern Illinois University. Any student on probation must petition a faculty committee in order to participate in co-curricular activities. Since the petition must be presented in person to the Director of Student Activities, the opportunity is available for additional individual counseling. A second regulation requires all officers of recognized campus groups to have an all-over "C" average at the time they are selected for an office. A further study will be made to determine the effect of this rule on the over-all scholastic achievement of student leaders.

VOCATIONAL GUIDANCE IN INDIA

Vocational guidance workers in India face a problem familiar to many of their American counterparts—persuading officials to give them adequate financial backing. An ILO expert visiting India reports, "It might be argued that very much of practical work cannot be done until the financial resources are strengthened. This, of course, cannot be denied, for as guidance is leaving the planning stage the costs are bound to rise steeply and the need for increasing support from authorities will be urgent. However, financial authorities are no more generous in India than elsewhere. They will not be convinced by anything but practical work and results. . . . The day it can be said that tools and techniques have been squeezed dry, that day it will be reasonable to ask for increased resources."—*Nordisk Yrkesvagledning*, No. 3, 1956.

Concurrent Validity of
THE MOONEY PROBLEM CHECK LIST

STANLEY L. SINGER and BUFORD STEFFLRE

THE USE OF STANDARDIZED testing instruments without first examining their value for a particular school or situation may result in obtaining only part of the information inherent in the test. To make best use of a test it may be necessary to gather local norms and to relate test scores to other information available on the students. This brief article tells the steps taken by one counseling center to localize the *Mooney Problem Check List* [4] by examining its relationship to other variables found to be important in veterans counseling. A similar series of steps might well be taken by school counselors who wish to make use of this or similar instruments.

Increasing recognition that the use of personality tests by relatively untrained personnel may lead to dangerous practices and unfounded conclusions has resulted in greater interest, particularly among school guidance workers, in simpler and more straightforward procedures like those embodied in such instruments as the *Mooney Problem Check List*. Check lists have the advantage of permitting the subject to indicate those problems of which he is aware and willing to admit. This advantage reduces the likelihood that there will be unskillful and premature probing into areas which the individual is not ready to examine. An additional advantage of the *Mooney Problem Check List* is the fact that there are four forms—Junior High School, High School, College and Adult—with items appropriate to the circumstances of people in a wide age range.

A disadvantage of this instrument in its present form is the lack of normative data and the paucity of information relating scores on the Check List to standardized personality tests and other data which would permit judgments about the concurrent validity of the Check List.

STANLEY L. SINGER is Psychologist with Valley Psychological Consultants, Sherman Oaks, California, and BUFORD STEFFLRE is Assistant Professor, College of Education, Michigan State University, East Lansing, Michigan.

Previous Studies

Congdon [2], working with the College Form, compared scores on the *Bell Adjustment Inventory* with sections of the Check List, which purported to measure similar areas, and obtained positive correlations ranging from 0.38 to 0.56. He also found, as have others [1, 7], that college students tend to indicate most problems in the areas of Adjustment to College Work (ACW), Personal-Psychological Relations (PPR), and Social and Recreational Activities (SRA). The least number of problems seem to be in the areas of Home and Family (HF), and Morals and Religion (MR). McIntyre [6] studied the concurrent validity of the high school form by finding that (1) less intelligent high school students had a greater number of problems in Adjustment to School Work (ASW) than did the more intelligent students, (2) seniors had more problems in Future—Vocational and Educational (FVE) than did sophomores, (3) boys had more problems in Adjustment to School Work (ASW) and Future—Vocational and Educational (FVE) than did girls, (4) students from broken homes had more Home and Family (HF) problems than did students whose homes were intact, and (5) negroes had more problems in Finances, Living Conditions and Employment (FLE) than did white students. Entwistle [3] used a modified College Form with a group of veterans in college and found that their areas of least concern were Courtship, Sex and Marriage (CSM),

and Home and Family (HF). He found that the married veterans checked *no* problems in the area of Courtship, Sex and Marriage (CSM). (The fact that the Check Lists were filled out at home, possibly in the presence of the veteran's wife, may have influenced this finding.) Most frequently indicated problems for Entwistle's group were in the areas of Finances, Living Conditions and Employment (FLE) (especially for married veterans), Adjustment to College Work (ACW), and Curriculum and Teaching Procedures (CTP).

Distribution of Problems

The suggestion, supported by Entwistle's study, that veterans may have problems peculiar to their status has led to the gathering of the data to be presented here. The *Mooney Problem Check List*—Adult Form was given to an unselected group of veterans consecutively presenting themselves for vocational counseling in a counseling center in a large metropolitan area. Since the number of items in each problem area is not equal in the Adult Form, the ranking of areas was done by dividing the total number of problems checked by the entire group by the number of items included in the area. The resulting quotient gives what may be called an "index of concern," which corrects for number of items in the area and permits ranking the problem areas to indicate the extent to which veterans admit problems in these several areas. To illustrate—the total number of problems checked by all of the group in the area of Health (H) was 300, the number of items included in this category is 36, the index of concern is 83. Since the Check List provides not only for an indication of problems but for a further designation as to which items are seen as "serious" problems, this calculation process was duplicated for this designation. The results are indicated in TABLE 1.

When differences in the categories used in the College Form and the Adult Form are taken into account, the chief discrepancy between these findings and previously reported results lies in the greater evidence of concern about problems in the area of Occupation (O). This finding of course would have been expected from the fact that this group of veterans was in the process of receiving vocational counseling.

TABLE 1

Amount and Direction of Admitted Concern with Regard to Areas on the Mooney Problem Check List—Adult Form

	N = 149 Veterans			
Problem Area	*Index of Concern (by Problem)*	*Rank*	*Index of Concern (by Serious Problem)*	*Rank*
Health (H)	8.3	6.5	2.6	7
Economic Security (ES)	14.3	4	5.2	4
Self-Improvement (SI)	28.2	1	8.1	1
Personality (P)	16.9	3	6	3
Home and Family (HF)	8.3	6.5	2.8	5.5
Courtship (C)	7.8	8	2.5	8
Sex (S)	6.8	9	1.4	9
Religion (R)	10.4	5	2.8	5.5
Occupation (O)	17.9	2	6.8	2

Occupation Problems

During this vocational counseling process about half of the subjects selected a vocational objective toward which they planned to work. The group which selected a vocational objective was compared with the group which was unable to select an objective, and four correlations were computed. (1) The correlation between the selection of a vocational objective and the total number of problems checked was r_{bis} —0.03. (2) The correlation between the selection of a vocational objective and the total number of serious problems checked was r_{bis} —0.01. (3) The correlation between the selection of a vocational objective and the number of problems checked in the area of Occupation (O) was r_{bis}—0.20. (4) The correlation between the selection of a vocational objective and the number of serious problems checked in the area of Occupation (O) was r_{bis} —0.34. Data regarding the selection of an objective was available for only 123 subjects and for this number a correlation

of .26 is significant at the 1 per cent level [8]. Selection of a vocational objective is seen to be inversely and significantly related to the admission of problems in the area of Occupation (O) but unrelated to the total number of problems admitted. These findings indicate that, with this population, the Check List was a worthwhile instrument for pointing up an area of concern to the subjects.

Courtship and Sex

The next analysis was occasioned by Entwistle's finding that married veterans were unconcerned about problems of sex and courtship. For 146 veterans, information about their marital status was available. Fifty-five of this group were married. The married veterans were compared with the single veterans with regard to the number of problems checked in the areas of Courtship (C) and Sex (S). The correlation between being married and the number of problems admitted in the Courtship (C) area was r_{pbi} —0.15. The correlation between being married and the number of problems admitted in the Sex (S) area was r_{pbi} —0.07. An examination of the items in these two areas suggests that they might well concern both single and married veterans.

Not finding a suitable life partner. (C)
Deciding whether I'm really in love. (C)
Afraid of the responsibilities of marriage. (C)
Finding it hard to control sex urges. (S)
Fear of having a child. (S)
Sexual desires differ from husband's or wife's. (S)

It seems likely that this group of married veterans felt freer in a counseling center to indicate problems in these areas than did the group in Entwistle's study who took the Check List in their homes. However, the correlations between marital status and problems, while in the expected direction, are small and not statistically significant.

Temperament and Problems

Finally, correlations were calculated between scores on the *Guilford-Zimmerman Temperament Survey* [5] and total number of problems and total number of serious problems for the 109 veterans who had been given both tests. Results of these correlations are shown in TABLE 2.

TABLE 2

Correlations between Scores on the Guilford-Zimmerman Temperament Survey and the Number of Problems and Serious Problems Admitted in the Mooney Problem Check List—Adult Form

N = 109 Veterans

Treatment Area	*Problems*	*Serious Problems*
General Activity	—0.15	0.00
Restraint	0.00	—0.01
Ascendance	—0.22*	—0.04
Sociability	—0.37†	—0.15
Emotional Stability	—0.42†	—0.20*
Objectivity	—0.33†	—0.18*
Friendliness	—0.31†	—0.19*
Thoughtfulness	0.12	0.08
Personal Cooperation	—0.19*	—0.10
Masculinity of Interest	—0.14	—0.07

* —5% level.
† —1% level.

It will be seen that veterans who check many problems tend to be withdrawn, unsociable, emotionally unstable, subjective, less friendly, and less cooperative. While these relationships between temperament traits and number of admitted problems are small, they are in the expected direction and statistically significant. The statistical significance of these findings diminishes when serious problems are related to temperament although the admission of serious problems is related at the 5 per cent level to lack of emotional stability, to subjectivity, and to unfriendliness. A further interesting finding is the positive relationship (very small and not statistically significant) between the number of problems checked and thoughtfulness. It is possible that the more thoughtful subject sees and admits personal problems to a greater extent than does the less thoughtful subject.

Summary

This brief study seems to indicate several conclusions which find some support from the data presented.

1. Although the various groups which have been studied and reported in the literature have considerable similarities regarding their degree of concern for the several areas of the Check List, the differences among these groups are great enough to suggest the value of developing local normative data appropriate to the population with which the Check List is to be used.

2. Veterans not selecting a vocational objective during counseling have no more total problems than do veterans who do select an objective but these problems are distributed so that they have more problems in the area of Occupation (O). This finding suggests the value of the Check List in directing counselor and client to areas of real client concern.

3. Married veterans indicate about as many problems in the area of Sex (S) and Courtship (C) as do single veterans. This finding suggests that the Check List conceives of these two areas in a way which makes them applicable to veterans regardless of their marital status.

4. Veterans checking many problems are more apt to indicate certain undesirable temperament traits than are veterans checking fewer problems. This finding suggests that a high score on the Check List may accompany other manifestations of the presence of problems in adjustment and that these adjustment difficulties may be more basic than the situational aspect of the Check List would suggest.

5. The authors feel, apart from the data presented here, that open check lists of this type, such as the SRA Youth Inventory and the SRA Junior Inventory, will play an increasing role in counseling situations particularly in school settings. Check Lists may have special value in weaning teachers and counselors away from other instruments with more potential for damage to the student. If a "personality" measure *must* be used why not one which claims little and which openly enables the student to cover up those problems which he would rather not discuss.

References

1. Bennett, Bruce L. Improving college health teaching. *Amer Ass. Hlth., phys. Educ. Rec. J.*, Dec., 1952, *23*, 24–26.
2. Congdon, N. A. Perplexities of college freshman. *Educ. psychol. Measmt.*, 1943, 367–375.
3. Entwistle, Harry Grant. Problems of male, white veterans of River Road dormitories (G.I. village) the Ohio State University. Master's thesis, Ohio State Univ., 1948.
4. Gordon, Leonard V., & Mooney, Ross L. *The Mooney Problem Check Lists manual, adult form.* New York: Psychological Corporation, n.d.
5. Guilford, J. P., & Zimmerman, Wayne S. The Guilford-Zimmerman Temperament Survey manual. Beverly Hills, California: Sheridan Supply Company, 1949.
6. McIntyre, Charles J. The validity of the Mooney Problem Check List. *J. appl. Psychol.*, 1953, *37*, 270–272.
7. Peters, Herman J., & Gehring, Robert W. Concerns of prospective teachers. *Educ. Adm. Superv.*, 1950, *36*, 425–428.
8. Walker, Helen M., & Lev, Joseph. *Statistical inference.* New York: Henry Holt, 1953.

W.U.S. CONDUCTS ENQUIRY INTO STUDENTS' WAY OF LIFE

An inquiry into the living conditions and housing of student communities is being undertaken by the World University Service with assistance from UNESCO. Problems common to a large number of countries will be studied and practical solutions proposed. The enquiry will also enable the W.U.S. to collect valuable information on the various student centres now being established in a number of countries. (UNESCO)

Do Renewable Scholarships Promote Higher Grades?

SELBY G. CLARK, E. WAYNE WRIGHT, and CLYDE A. PARKER

In previous years people have made studies comparing the achievement of scholarship recipients with that of other university students [*1, 2, 3, 4*]. In 1953 Williamson and Feder [5] made a comparative study in which scholarship students were matched with non-scholarship students on A.C.E.[1] scores, and like the previous studies of other writers, they found that the scholarship students did better, though not significantly so, than did non-scholarship students as measured by College Grade Point Average.

In light of these studies Brigham Young University revised its procedures for awarding scholarships. Previously a scholarship award to an incoming freshman had constituted one quarter of free tuition and general fees. Under the revised policy, it was determined to make these scholarships renewable each quarter for one year as a means of motivating the students toward greater academic achievement.

This study was designed to determine whether these renewable scholarships produced greater academic achievement among the scholarship recipients than that achieved by the non-recipients. In an attempt to study the incentive factor of the renewable scholarships, a group of students who received scholarships were matched with a group of non-scholarship students on the basis of (a) apparent general motivation and ability as measured by high school grade point averages, and (b) A.C.E. scores.

Although the differences in college achievement between the scholarship group and the non-scholarship group may not be wholly attributable to the differences in motivation, the only known difference between the two groups was the fact that one group received scholarships and the other did not. Other variables were controlled either by matching, random selection, or a combination of these two as will be explained below.

The Study was designed to test the following null hypotheses: (a) No significant difference exists between the mean college grade point average of the students who are recipients of scholarships and the mean grade point average of non-scholarship students. (b) There is no significant difference in the percentage of students in the scholarship group who receive a 2.5 grade point average and the percentage in the non-scholarship group who receive such a college grade point average.

Procedure

The scholarships issued to high school graduates were changed from single quarter awards consisting of tuition and general fees to possible one year awards based on the student's academic success at Brigham Young University. These scholarships were available for a maximum of three quarters and were renewable only if the student had maintained a 2.5 grade point average on his previous quarter's work, (A = 3, B = 2, C = 1, D = 0, E = −1).

For the school year 1954–1955, scholarships were issued to high school graduates who were in the upper 10 per cent of their graduating class as indicated by their high school principals. Of these, 247 accepted the award and enrolled at B.Y.U. These scholarship recipients were then divided into two groups, A and B:

Group A: Students who had maintained a cumulative grade point average in high school of 2.5 or above.

Selby G. Clark is Chairman of the Undergraduate Scholarship Committee and E. Wayne Wright is a Counselor in the Counseling Service at Brigham Young University, Provo, Utah. Clyde A. Parker, currently on leave from B.Y.U., is a Teaching Assistant at the University of Minnesota, Minneapolis.

[1] American Council on Education Psychological Examination.

Group B: Students who had less than a 2.5 cumulative high school grade point average. (A high school grade point average of 2.5 was selected as the cutting point since it was felt that future scholarship students would probably be selected from those in the 2.5–3.0 stratum.)

Two control groups, C (2.50–3.00) and D (1.00–2.49) were selected to match the experimental groups. These control groups were selected by a stratified random sampling of the entire B.Y.U. freshman population. The strata were established by tenths of high school grade point average, *i.e.*, 2.50–2.59, 2.60–2.69, etc.

Groups A and C were compared on A.C.E. scores and there was found to be no significant difference in high school grade point average or in the totals of the two groups.

Groups B and D were also compared by A.C.E. scores, and significant differences between the two groups were found, though they were matched by high school grade point average strata. Two additional random samples were drawn in an attempt to establish a better control, but they also differed significantly with Group B on A.C.E. scores. Therefore, in order adequately to test the null hypotheses, with the groups being equal in measured ability, Group B was matched with Group D on the basis of exact A.C.E. raw scores by random selection within each high school Grade Point Average stratum.

Tests of Significance were made by means of the t-ratio between each of the experimental groups and its control group in the following ways: (these data are presented in TABLES 1 and 2).

a. A comparison of the mean grade point average for each experimental and control group based on the group's fall quarter grades.

b. A comparison of the mean grade point average for each experimental and control group based on the groups' cumulative grades for fall and winter quarters.

c. A comparison of the percentage of students of each experimental group and its matched control who achieved a 2.5 or above grade point average at B.Y.U. for fall quarter.

d. A comparison of the percentage of students within each experimental and control group who achieved a 2.5 or better cumulative grade point average at B.Y.U. for fall and winter quarters combined.

Results

1. There were found to be significant differences (.001 level) between Group A (2.50–3.00 HS GPA) and its control, Group C, for the fall quarter mean college grade point average and for the two quarter cumulative grade point average. There were also significant differences at the .001 level in the proportion of students in Group A versus Group C, who made a 2.5 college grade point average for fall quarter and for the two quarters cumulative.

2. Significant differences at the .02 level were found between Group B (HS GPA 1.00–2.49) and its control, Group D, for the fall quarter mean college grade point average and for the two quarters cumulative grade point average. There was not, however, a significant difference in the proportion of Group B versus the Group D who made a 2.5 college grade point average either for fall quarter or for the cumulative two quarters.

3. Significant differences at the .001 level were found in the mean college grade point averages for fall quarter and in cumulative grade point averages for the two quarters for the combined total of Groups A and B as compared with the mean grade point average of the combined control groups C and D. There were also found to be significant differences at the .001 level between the proportion of students in the combined experimental and the combined control groups who made a 2.5 college grade point average for fall quarter, and at the .01 level of significance for the cumulative two quarters.

4. Since there was a significant difference in the mean grade point averages between the students in Group B and Group D, the students of this high school achievement level appeared to be motivated toward

TABLE 1

Comparison of College Achievement Differences of Scholarship and Non-Scholarship Groups

Fall Quarter

HSGPA 2.5–3.0*	*Scholarship Group A*	*Control Group C*	*t-ratio*	*Significance Level*
Number	124	177		
Mean CGPA†	2.238	1.952	4.269	0.001
per cent above	no. 50	no. 37		
2.5 CGPA†	% 40	% 21	3.564	0.001

HSGPA 1.00–2.49*	*Scholarship Group B*	*Control Group D*	*t-ratio*	*Significance Level*
Number	47	47		
Mean CGPA†	1.795	1.525	2.348	0.02
per cent above	no. 5	no. 2		
2.5 CGPA†	% 11	% 04	1.325	no

HSGPA 1.00–3.00*	*Scholarship Groups A & B*	*Control Groups C & D*	*t-ratio*	*Significance Level*
Number	171	224		
Mean CGPA†	2.116	1.862	4.178	0.001
per cent above	no. 55	no. 39		
2.5 CGPA†	% 32	% 17	3.459	0.001

* High School Grade Point Average.
† College Grade Point Average.

TABLE 2

Comparison of College Achievement Differences of Scholarship and Non-Scholarship Groups

Fall and Winter Quarters Cumulative

HSGPA 2.5–3.00*	*Scholarship Group A*	*Control Group C*	*t-ratio*	*Significance Level*
Number	124	177		
Mean CGPA†	2.213	1.969	4.207	0.001
per cent above	no. 45	no.34		0.001
2.5 CGPA†	% 36	% 19	3.287	

HSGPA 1.0–2.49*	*Scholarship Group B*	*Control Group D*	*t-ratio*	*Significance Level*
Number	47	47		
Mean CGPA†	1.756	1.460	2.508	0.02
per cent above	no. 3	no. 3		
2.5 CGPA†	% 06	% 06	0.00	no

HSGPA 1.0–3.00*	*Scholarship Groups A & B*	*Control Groups C & D*	*t-ratio*	*Significance Level*
Number	171	224	4.043	0.001
Mean CGPA†	2.088	1.862		
per cent above	no. 48	no. 37	2.618	0.1
2.5 CGPA†	% 28	% 17		

* High School Grade Point Average.
† College Grade Point Average.

higher achievement as a result of the increased incentive through the renewable scholarships. However, they appear to be of too low an ability to achieve a college 2.5 grade point average as a group. It can be noted that the proportion of students in Group B who achieved a 2.5 fall quarter or two quarter cumulative grade point average was not significantly greater than in Group D as it was in the comparison between groups A versus C (See TABLES 1 and 2). Ability as measured by the A.C.E. Scores in Group B appeared to be a more important factor in achievement than motivation as measured by high school grade point averages. This is substantiated by the fact that when the original control sample in this group was drawn by matched strata of high school grade point averages, it was found that students who had greater achievement in college invariably had higher A.C.E. scores than students in the control group of equivalent high school grade point averages. It was therefore necessary, in order to evaluate the motivation variable with the ability factor held constant, to match the control with the experimental group by exact A.C.E. scores as well as high school grade point average.

Conclusions

1. This study seems to indicate that sufficient additional extrinsic motivation can be

produced in scholarship students through the rewarding effect of a renewable-type scholarship to produce a significant change in effort which results in significantly higher college grades.

2. It would seem from the results that, if a 2.5 or higher college grade point average is the basis for renewing the scholarship, such scholarships should not be awarded to students with cumulative high school grade point averages of less than 2.50, since students below this level, although they apparently are motivated to achieve, do not have sufficient academic ability to achieve a very high proportion of 2.5 college grade point averages.

3. Since the factor of economic need was not covered by this study, the students in the control and experimental groups were not matched on this basis. It was assumed however, that the random selection did eliminate this factor. Further studies should, therefore, be made to determine whether or not the motivation created by a renewable scholarship is greatly affected by economic need and if, therefore, these scholarships should be restricted to students of proven need.

References

1. Krugman, Abraham A. A comparison of grades of scholarship students and all students in the Washington Square College of New York University. Unpublished Master's thesis, New York Univ., 1932.
2. Miller, Sarah D. Leeds. A study of the achievements of scholarship holders in the class of 1932 in Pennsylvania colleges. Unpublished Doctor's dissertation, Temple Univ., 1935.
3. Moon, George R. Records of students who entered the University with freshman scholarships. *Sch. Rev.*, 1930, *38*, 443–449.
4. Williamson, Edmund G. College grades and NYA scholarships. *Sch. & Soc.*, 1937, *46*, 510–512.
5. Williamson, B. Lois, & Feder, Daniel D. Scholarship winners, how they rate on campus and in class. *Personnel Guid. J.*, 1953, *31*, 236–240.

COMMENTS

ALMOST AS THOUGH to match the developing upsurge of interest in college attendance there has been an almost concomitant increase in number of scholarships and related forms of assistance to high school graduates. Traditionally scholarship donors and institutions of higher education have expected scholarship holders to give some evidence of their scholastic superiority. On the other hand, it has been argued that the scholarship winner, freed from some degree of economic necessity and pressure, should have greater opportunity for participation in the extra-class life of the institution of higher learning. Both of these outcomes seem to have educational validity.

If the reader is left confused by this picture, he is then actually perceiving it as it is. The practice reported at Brigham Young University does indeed place additional premium on earning high grades in college. It retains the competitive basis for scholarship awards beyond the first year. In effect, it enhances the motivation of those who are presumed to be the best motivated students already. The controls used by the authors of this article insured both intelligent and motivated students in the group awarded scholarships. The University's policy would seem to have reinforced the motivation for earning high grades.

This writer certainly has no disposition to undervalue the importance of grades earned as indicators of the returns on the student's investment of time, energy, and intelligence. However, every college student personnel worker has a very genuine concern in the development of leadership qualities as they may be manifested in a host of other activities which are part of the educational scene. It does not appear likely that the intelligent, motivated student is apt to forego either of these gifts very often once he is attending college. There is, however, the very real possibility that such programs may discourage the very able student from exciting intellectual exploration lest he endanger his grade-getting ability. Furthermore, there is even greater likelihood that such students may be dis-

couraged from the development of social leadership by virtue of the insistent demand for high grades.

The authors of the study point to another consideration which certainly further clouds the scholarships picture. This is the element of economic need and its influence on student motivation. That the need factor will play an increasingly important part in scholarship awards is already indicated by the National Merit Scholarship program procedure. Other foundations and the colleges themselves have attempted to assess need in making their awards.

The studies referred to by the authors, the present study itself, and the issues which still remain in doubt argue that we shall have to do considerably more exploration in this field in order to derive an adequate formula for the awarding of scholarship assistance. It is clear that donors themselves are not too sure what they desire to accomplish with scholarships. The colleges inevitably will evaluate effectiveness of programs in terms of grades students earn. Society may well ask whether these funds are being invested in individuals whose long run value to the society which provides their opportunity represents a fair return on its investment.—DANIEL D. FEDER, *Dean of Students, University of Denver.*

REPORT ON BAY CITY TEACHER AIDE PROGRAM

The controversial Bay City teacher aide experiment is described as "successful" by their Superintendent of Schools, Paul W. Briggs, in his first report on the new plan. "The staff of the Bay City Public Schools regret that some of these (earlier) reports (by outsiders) . . . have claimed that the Bay City teacher aide program was a panacea for all ills and problems in education. They further regret that some members of the educational profession have seen fit to condemn the experiment without proper observation or study of the same."

The four-year-old experiment has been financed by the Fund for the Advancement of Education. The specially certified aides handled clerical housekeeping and minor instructional activities, so teachers could have larger classes.

Summarizing his evaluation of the experiment, Superintendent Briggs says: "It is our belief that the quality of education has been maintained in the experiment at a comparable level to the general program in the Bay City public schools. We have found that it is not only possible to maintain a good program of academic achievement; but also, in the less tangible area of child growth and development, we have been able to attain very satisfactory results. Good aides have an active interest in children, and under proper guidance can be very helpful in creating the kind of classroom atmosphere which encourages wholesome personality development. In many cases, the aide has been able to relieve the teacher of some of the routine activities so that she may devote more time to becoming better acquainted with the individual child in the classroom."

Six suggestions made by Mr. Briggs for a successful program are careful selection of aides, a strong program of professional supervision, placement of aides with a cooperative teacher, an in-service training program, use of larger rooms with extra facilities for the larger classes, and an explanation of the program for public and staff.

The Relation of Extracurricular Participation to Leadership Criteria

JOHN D. KRUMBOLTZ

THE VALUE OF participation in high school extracurricular activities in the development of future leaders and good citizens has been asserted by many writers [*20, 27, 37, 45*]. Some write in glowing terms of the leadership values to be derived from specific activities such as newspaper publishing [*6*], debating [*40*], athletics [*19, 49, 51*], and dramatics [*14, 16, 25*]. Others are more skeptical [*30, 57*]. Unfortunately, the evidence upon which these opinions are based is seldom mentioned. The values are usually assumed to exist by the intrinsic nature of the activity. Nevertheless, several organizations are reported to use this type of information for selection purposes [*3, 4, 10, 15, 39*].

The purpose of this review is to examine and evaluate critically the research evidence relevant to the problem of predicting future leaders from their record of extracurricular participation in high school. Emphasis is placed on studies with male subjects, but studies using female subjects are reviewed when they appear especially pertinent. Other reviewers have dealt with leadership and have touched on a few studies evaluating extracurricular activities [*2, 21, 22, 24, 28—p. 663, 33, 34, 42, 43, 54, 56*]. The present review does not intend to duplicate the broad perspective contained in most of the above reviews. This review is confined to the more narrow problem of predicting leadership from only one type of data, *i.e.*, high school and college extracurricular participation.

JOHN D. KRUMBOLTZ is with the Air Force Personnel and Training Research Center, Lackland Air Force Base, San Antonio, Texas.

This investigation was carried out under the Air Force Personnel and Training Research Center in support of Project No. 7701. Permission is granted for reproduction, translation, publication, and use or disposal in whole or in part for the United States Government.

Measurement of extracurricular participation

Participation in extracurricular activities can be and has been measured in a variety of ways. Some studies define leaders as those who have participated in more than some given number of activities and nonleaders as those who have participated in less than this number [*26, 35*]. The cut-off number is arbitrary and may be set at any number logical to the investigator.

Other studies catagorize extracurricular activities by types, *e.g.*, athletics, elective offices, forensics, etc. Analyses are then made on the number of categories regardless of the number of activities within each category [*11, 13, 29, 32, 41, 47, 55*].

Many studies use more complicated rating techniques to arrive at a score which represents the extent of an individual's participation [*1, 8, 33, 52*]. These usually involve point systems in which each activity is worth a stated number of points, and different offices or achievements within each organization or activity are worth an additional number of points. The point values are always arbitrarily determined.

Still other studies assess the extent of participation by a single rating made by a judge or group of judges after viewing the

record of a person's activities [*4, 9, 12, 18, 23, 38*]. This system has the disadvantages associated with subjective judgments, but it is sometimes necessary in studies which draw subjects from a variety of different schools.

The question that has received little attention concerns the optimal weighting of each kind of activity. It is possible that some activities are worth considerably less than others in terms of their predictive value for adult leadership. Objective studies of this problem have not been located by the present reviewer.

One other methodological problem involves the method by which data are collected. Many studies rely on the subject to remember the activities in which he participated a number of years ago. The danger of selective remembering affecting the validity of these studies should be apparent. Schools which maintain a permanent record of each student's activities provide the best source of data. The school yearbook is often used to provide this information and is almost always superior to a follow-up questionnaire years later.

Leadership Criteria

Sells has stated that "the principal problem in Air Force research programs on leadership has been research on the criterion" [36, p. 194]. The problem of finding an adequate criterion for leadership has proved to be a serious stumbling block in a number of studies. A number of different criterion measures have been used. Each has advantages and disadvantages which will not be discussed here. The present reviewer has classified these different measures into seven categories. They are listed below along with the studies which utilize each type:

1. Number of leadership positions held [*1, 9, 11, 26, 32, 41, 47*].
2. Sociometric ratings [*8, 17, 29, 31, 50, 52, 55*].
3. Situational tests [*17, 53*].
4. Income [*4, 9, 12, 13, 18, 23, 35, 38, 46*].
5. Recognition in publications [*5, 29*].
6. Personality tests [*7, 17*].
7. Special leadership behavior [*9, 35*].

Relation of High School Extracurricular Participation to Adult Leadership

Courtenay [*11*] reported a study on a female population from Lindbloom High School in Chicago between the years 1922 and 1934. A group of 100 girls who had served on the Senior Girls Council were designated leaders. Girls had obtained this position by being elected by their peers and being approved by the faculty. An equal number of non-leaders were matched on socioeconomic background, ethnic heritage, scholarship rating, and age at graduation. These two groups were then compared in a follow-up study on a number of variables as indicated in TABLE 1.

TABLE 1

Comparison of Leaders and Non-Leaders on Various Leadership Criteria [*11*]

Criteria	*Leaders*	*Non-Leaders*
Mean Number of Leadership Positions Held		
In High School	7.9	0.9
In College	5.5	1.5
In Community	4.7	1.1
Number Attending College	72	29
Median Annual Earnings	(N=92) $1,289	(N=88) $1,015

The author concludes that leadership is a characteristic that does persist. Unfortunately, the author does not include any tests of significance for the differences observed, nor are any measures of dispersion included. It seems likely, however, that the differences would be statistically significant.

Shannon [*38*] conducted a follow-up study of one high school's graduating classes between the years of 1914 and 1919. Leaders were identified by inspection of the high school annual and by the vote of teachers who had been in the high school for at least ten years and remembered who had been the leaders. A group of scholars was chosen from the honor roll. In addition a random group of graduates was chosen. No care was taken to insure that these three groups

were mutually exclusive. Annual income was used as the criterion of success. The leaders ranked highest in income; they were followed by the random group, while the scholars had the lowest income. No measures of dispersion and no tests of significance were reported. The methodological flaws in the study are serious enough to make the results inconclusive.

Rugg [35] reported on a thesis done by Homer N. Peck. From a list of 5,877 graduates from Denver high schools between 1889 and 1920, the addresses of 1,187 were located. Of these, 165 (14 per cent) were willing to complete a questionnaire. These 165 were divided into two groups on the basis of their report of the number of activities in which they had participated while in high school. A total of 68 had participated in three or more activities, while 97 had participated in less than three activities. A comparison of these two groups on a number of criterion measures revealed contradictory trends in the means and medians. No measures of dispersion or tests of significance were calculated. The lack of even a consistent trend in the results can be at least partially attributable to the fact that the author obtained a non-random sample of only 2.8 per cent of his total population. In addition, splitting the sample on the basis of three or more versus less than three activities does not provide a very sharp contrast. The author concluded that there is no difference in his groups, but the methodology of his study leads one to conclude that no conclusions can be drawn.

Clem and Dodge [9] in a follow-up study of 308 graduates of the Rome Free Academy of Rome, New York, between 1914 and 1919 obtained a 72 per cent return of his questionnaires. Three groups were formed. A group of leaders were chosen on the basis of judgments made from the high school annual and four teachers who chose graduates who had been "prominent" and whose ability and influence were recognized by the faculty and their fellow pupils. The scholars were the six pupils from each class with the highest grade average. Every eighth pupil on the class roll was designated a random pupil. These three groups were not mutually exclusive, and the extent of the overlap was not reported. A number of criteria were examined with no definite trends emerging. The leaders earned a median income of $3,250, while the scholars and random group members each had a median of $3,000. However, using the criterion of number of positions of community leadership, the authors found that 13 positions were held by 23 of the leaders (57 per cent); 14 positions were held by 24 of the scholars (58 per cent); and 15 positions were held by 22 of the random group (68 per cent). Although the author concluded that the leaders in high school were more successful than the scholars or the random group, the evidence he presented does not support this conclusion.

Crowley [12] followed up by questionnaire 485 graduates of the 1927–1936 classes of a small midwestern city high school. The percentage returning the questionnaires was not stated. A total of 48 men and 59 women were designated "leaders" on the basis of their high school activity participation as judged by two fellow classmates and two teachers. The leaders were found to be more intelligent and to have better academic records in high school. Several years after graduation the mean monthly salary of the men leaders was $129.47 while the mean of all men graduates was $94.37. The women leaders averaged $80.48 while all women graduates averaged $63.17. No standard deviations or tests of significance were reported. The leaders had more "higher ranking occupations" and less unemployment than the total group. The lack of a comparable control group plus the other methodological faults preclude any statement of a relationship between high school participation and adult income in this study.

A certain amount of light has been cast on this problem by the Army Air Forces Aviation Psychology Program during World War II [48]. Five groups of returning fighter pilots, bomber pilots, bomber copilots, navigators and bombardiers were given the *Biographical Data Blank* DE101B after returning from combat duty. These men were divided into high- and low-promo-

tion groups on the basis of the number of promotions received while in combat. The adequacy of this criterion of leadership is subject to question, but it does seem to have some relationship to some other criteria of leadership [*48*, p. 82]. Three questions in the *Biographical Data Blank* related to high school participation. Item five asked about the activities in which one was most likely to engage after school hours. No significant differences were observed between high- and low-promotion groups on the number participating in team sports. Item six concerned the number of memberships in clubs or organizations in school. With the group of fighter pilots (but none of the other four groups) those who participated in two or more activities were more likely to be in the low-promotion group than those who participated in none or one. This difference was significant only at the ten per cent level, however. Item seven asked how often a person was elected president, secretary, or similar officer of his class, club, or similar organization while in high school. Those who answered "not at all" were more likely to be in the low-promotion group of the bomber pilots significant at the ten per cent level. The same was true at the five per cent level for a group of bombardiers. The other three groups had no significant differences on this item. The results of this study are not conclusive. It would appear that there is a tendency for men who were not elected to offices while in high school to receive fewer promotions in combat than those who had been elected to high school offices. The actual number of memberships in organizations differentiated in only one group at the ten per cent level but not in the expected direction. Participation in team sports did not differentiate. This study was weak in that the *Biographical Data Blank* was not administered until after the men had returned from combat, and no attempt was made to confirm their statements of participation.

Four studies attempted to determine the relationship between extent of extracurricular participation in high school and in college [*1, 26, 32, 41*]. Although they show that there is some carry-over in particular activities, they provide no evidence that the general level of activity in terms of the number of activities and leadership positions is similar in high school and college.

Relation of College Extracurricular Participation to Adult Leadership

The best study in this area has been reported by Bridgman [*4*]. He studied a group of supervisors and executives working in the Bell Telephone System. The activities in which each person engaged while in college were obtained from college yearbooks. The activity record of each person was judged as either "substantial," "some," or "none," depending on the number of his activities and the intensiveness of his participation. The reliabilities of these ratings were not reported. The criterion of success in the company was annual salary adjusted for number of years since graduation from college and for the varying salary schedules in different areas of the country. The meat of the study for purposes of this review is contained in TABLE 2. A clear

TABLE 2

Per Cent of Men in Each Salary Grouping by Campus Achievement [*4*]

Campus Achievement	*Number of Cases*	*Highest Third*	*Middle Third*	*Lowest Third*
Substantial	247	43%	33%	24%
Some	442	35%	34%	31%
None	621	28%	34%	38%

and consistent trend for people with "substantial" college extracurricular achievement to receive more of the higher salaries and for people with no college extracurricular achievement to receive more of the lower salaries can be noted. Bridgman did not make any test of the statistical significance of this trend, but the present writer, making a chi square test of the contingency table, obtained a chi square value of 23.768 which with four degrees of freedom is significant at the .001 level. Thus, for a population of executives in the Bell Telephone System, college extracurricular activities are a sig-

nificant factor in the prediction of success in the system. The criterion of annual income is a reasonably adequate criterion in this case because all employees are paid on a relatively homogeneous salary schedule in accordance with the leadership position attained.

Several other trends can be noted in this same study [4]. When both scholarship ranking in college and extracurricular participation are combined, the trends noted above become even more pronounced. Men with substantial participation who are also in the upper third of their college class in scholarship make up 52 per cent of the upper third of the salary range; their opposites, men with no college participation who ranked in the bottom third of their college classes, make up only 15 per cent of the upper third of the salary range. Another trend noted in this study concerned the relative importance of different types of college extracurricular activities toward the prediction of success in the company. Men participating in editorial and forensic activities tended to make the most money. They were followed by managerial, social, athletic, musical, and dramatic activities in that order. Incidentally, the range of salaries for varsity athletes was almost identical with the range for athletes who played but did not letter.

A study conducted on a class of the Squadron Officers Course in the U. S. Air Force [55] divided students into several categories on the basis of athletic history: those officers who excelled in any of the four major sports (N = 63), those officers who participated in any sports (N = 351), those who did not participate in sports (N = 185), those who excelled in football only (N = 21), and those who participated in football only (N = 135). Biserial correlations were computed between the above groups in terms of their leadership peer ratings at the Squadron Officers Course. Correlations were uniformly low, ranging from 0.016 to 0.051. The conclusion of this study was that there is no relationship between athletic participation and peer ratings in leadership. The study did not involve other types of extracurricular activities.

Gambrill [18] made a follow-up study of the graduates of six major colleges and universities for the Class of 1903 and obtained a 56 per cent response to her questionnaires. From data in the college yearbooks ratings from one to five were made on the extent of college extracurricular participation. The reported incomes were also ranked from one to five and a Pearsonian r was computed between these two sets of ratings for each of six occupations. Grade point averages were also obtained from college records and correlated with income. The results as computed are presented in TABLE 3.

TABLE 3

Correlations of Income Against Extracurricular Success and Scholarship for Several Occupations [18]

Occupation	N	Correlation between Extracurricular Success and Income r	P.E.	Correlation between Scholarship and Income r	P.E.
Teaching	46	0.19	0.09	0.11	0.09
Business	51	0.32	0.08	0.03	0.08
Law	29	0.28	0.11	0.58	0.07
Medicine	24	0.12	0.13	—0.21	0.13
Engineering	18	0.15	0.15	—0.25	0.16
Ministry	11	0.36	0.17	0.40	0.17
TOTAL	190	0.21	0.04	0.11	0.05

If one may be permitted to generalize from this study one might say that the extent of the relationships depended upon the particular occupation involved. In some occupations, such as business, extracurricular success appears more important than scholastic success. In others, such as law, scholarship appears to be more important. Actually, the study is of such a nature that none of these statements legitimately can be generalized, but it does call attention to the fact that the importance of extracurricular participation may vary with the particular occupation involved.

At Fresno State College in California, Jepsen [23] obtained from the college yearbooks the extra-class records of 488 male graduates for the years 1929–1938. The

extent of participation was rated on a scale of from 1 to 6. However, the author does not make it clear just how these ratings were made, and their reliability was not stated. The correlations of these ratings against the 1947 annual earnings of these people by occupation is given in TABLE 4. The correlation between grades in college and annual income for this same population was zero. These results are comparable with those reported in the previous study. Jepsen analyzed his data still further by taking the 10 people ranking highest in both extracurricular participation and in scholastic average and comparing them with the 16 people ranking lowest in both. The mean annual income for the high ranking group was $6,060 and for the low ranking group $4,393. No measures of dispersion or tests of significance were reported. The most impressive evidence seems to come from the correlations. Although one may question the mutual exclusiveness of the job classifications, it seems apparent that there was in general a tendency for participation in extracurricular college activities to be positively associated with annual income some ten to fifteen years later.

TABLE 4

Correlations of Extracurricular Participation Ratings and Income by Occupation [23]

Occupation	*N*	*r*	*P.E.*
Professional	27	0.06	0.12
Administrative	39	0.28	0.09
Business	110	0.23	0.05
Teaching	117	0.32	0.05
TOTAL	293	0.27	0.03

Zeleny [52] reports a study done at St. Cloud State Teachers College in St. Cloud, Minnesota. Leadership was measured by peer ratings in a class discussion situation. Extracurricular participation was measured by the regular college point system which takes into account both the amount and the level of participation. The correlation between leadership ratings and extracurricular participation on three different samples was 0.68 (N= 12), 0.59 (N = 21), and 0.17 (N = 35). The correlation between extracurricular participation and grades in student teaching was 0.44 (N = 91). It should be pointed out, however, that these are concurrent and not predictive validities.

Four other reports in this area are inconclusive because of severe methodological faults. Lack of a control group [47], biased sampling [13], extremely small sample size [29], and incomplete data [46] are the primary faults that make further discussion of these studies pointless.

Summary and Conclusions

Since many educational writers have claimed that extracurricular activities make a substantial contribution to student leadership ability, this review of the literature has been conducted to examine the evidence relating to these claims. A variety of methods have been used to estimate the extent of extracurricular participation. Many different criteria of leadership have also been utilized; each of these has certain limitations.

A review of the research evidence leads this reviewer to the following conclusions:

1. No conclusive evidence exists that high school extracurricular participation either has or has not a relationship to adult leadership. While there is a slight positive relationship in some studies, the methodological faults of these studies are serious enough to preclude any conclusions.

2. No evidence has been found on whether the level of high school extracurricular participation carries over to college extracurricular participation. That is, it is not known whether a person active in high school will tend to remain equally active in college.

3. There does appear to be some relatively conclusive evidence that college extracurricular participation is indicative of future leadership although the extent of the relationship may depend on other factors such as the occupation of the group involved and the specific criterion used.

Suggestions for Future Research

In view of the millions of dollars that are poured into high school extracurricular ac-

tivities each year, it is regrettable that no conclusive evidence exists to support the claimed values of these activities. It seems to the present writer that a number of studies are needed to clear up points raised by this review:

1. Is participation in high school extracurricular activities predictive of adult leadership? A well-controlled and well-designed study should be conducted with attention to such related variables as socioeconomic status, intelligence, scholastic achievement, etc.

2. What is the relationship between the extent of high school and college participation?

3. To what extent does the relationship between extracurricular participation and various criteria of leadership depend on the specific occupation of the group involved?

4. Do certain types of extracurricular participation have more predictive weight than others? If so, what are the optimum weights to be attached to each activity in order to predict various criteria of leadership?

5. What interrelationships exist among the various criteria of leadership? Although some research on this problem has been reported, a more complete study needs to be conducted. This study should include ratings by subordinates as well as all the other criteria.

6. Is participation in extracurricular activities an effective training device for future leaders? In other words, would people who become leaders be any more effective with a background of activity participation than without? This is an entirely different question than whether one predicts the other.

It is clear that much work has yet to be done to evaluate objectively the claimed values of extracurricular activities.

References

1. Auble, C. S., & Auble, D. Relation between high school and college participation in extra-curriculum activities. *Sch. Rev.*, 1953, *61*, 541–543.
2. Bellingrath, G. C. *Qualities associated with leadership in extracurricular activities of the high school.* Contributions to Education No. 399, Teachers College, Columbia Univ., 1930.
3. Benerd, G. How do pupils benefit by participation in the co-curricular programs? *Nat. Ass. sec. Sch. Prin. Bull.*, 1953, *37*, 103–111.
4. Bridgman, D. S. Success in college and business. *Personnel J.*, 1930, *9*, 1–19.
5. Burnett, C. W. Validating campus leadership. *Educ. Res. Bull.*, 1951, *30*, 67–73.
6. Campbell, L. R. Publishing school newspapers develops leadership. *Sch. Act.*, 1954, *25*, 155–157.
7. Carter, L. F., & Nixon, M. Ability, perceptual, personality, and interest factors associated with different criteria of leadership. *J. Psychol.*, 1949, *27*, 377–388.
8. Carter, L. F., & Nixon, M. Investigation of the relationship between four criteria of leadership ability for three different tasks. *J. Psychol.*, 1949, *27*, 245–261.
9. Clem, O. M., & Dodge, S. B. The relation of high school leadership and scholarship to post-school success. *Peabody J. Educ.*, 1933, *10*, 321–329.
10. Cosand, J. P., Jr. Admission criteria: a review of the literature. *Calif. J. sec. Educ.*, 1953, *28*, 12–21.
11. Courtenay, M. E. Persistence of leadership. *Sch. Rev.*, 1938, *46*, 97–107.
12. Crowley, J. J. Do student leaders excell after graduation? *Calif. J. sec. Educ.*, 1941, *16*, 167–170.
13. Edey, M. The class of '32. *Life*, June 16, 1947, 51–53.
14. Evans, D. R. Values to the pupil. *Nat. Ass. sec. Sch. Prin. Bull.*, 1949, *33*, 13–16.
15. Faint, G. R. College admission factors other than testing. *Nat. Ass. Deans Women J.* 1950, *13*, 134–136.
16. Foley, L. E. What's the good of dramatics. *J. Educ.*, 1951, *134*, 141–143.
17. French, J. W. Validity of some objective personality tests for a leadership criterion. *Educ. psychol. Measmt.*, 1954, *14*, 34–49.
18. Gambrill, Bessie L. *College achievement and vocational success.* Contributions to Education, No. 121, Teachers College, Columbia Univ., 1922.
19. Greene, F. M. Physical education for military leadership. *Education*, 1948, *68*, 458–462.
20. Huffman, H. A. Extra class activities contribute to the student's total education. *Nat. Ass. sec. Sch. Prin. Bull.*, 1949, *33*, 71–79.
21. Hunter, E. C., & Jordan, A. M. An analysis of qualities associated with leadership among college students. *J. educ. Psychol.*, 1939, *30*, 497–509.
22. Jenkins, W. O. A review of leadership studies with particular reference to military problems. *Psychol. Bull.*, 1947, *44*, 54–79.
23. Jepsen, V. L. College activities and vocational success. *Occupations*, 1951, *29*, 345–347.
24. Kahrhoff, R. E. Appraising activities. *Cath. educ. Rev.*, 1951, *49*, 601–615.
25. Lentz, A. B. Dramatics can help produce the socially efficient citizen. *Ohio Sch.*, 1952, *30*, 220–221.
26. MacLachlan, P. S. & Burnett, C. W. Who are the superior freshmen in college? *Personnel Guid. J.*, 1954, *32*, 345–349.
27. Mueller, K. H. Training for citizenship through student activities. *Personnel Guid. J.*, 1952, *31*, 162–166.
28. Munroe, W. S. (Ed.) *Encyclopedia of Educational Research.* New York: Macmillan, 1950.
29. Nicolson, F. Success in college and after. *Sch. & Soc.*, 1915, *2*, 229–232.
30. Noyes, E. S. Academic and non-academic ap-

praisal of candidates. *Nat. Ass. Deans Women J.*, 1950, *13*, 51–55.
31. Page, D. P. Measurement and prediction of leadership. *Amer. J. Sociol.*, 1935, *41*, 31–43.
32. Reavis, W. C. & Van Dyke, G. E. *Non-Athletic Extra-Curricular Activities.* U. S. Office of Education, Bulletin No. 17, 1932, Chap. 5.
33. Remmilin, Madaline K. Analysis of leaders among high school seniors. *J. exp. Educ.*, 1938, *6*, 413–422.
34. Ruch, F. L. *Bibliography on Military Leadership*, Technical Research Report No. 18, Human Resources Research Institute, Maxwell AFB, Alabama, 1953.
35. Rugg, E. *Summary of Investigations Relating to Extracurricular Activities.* Greeley, Colo.: State Teachers College, 1930.
36. Sells, S. B. Leadership research in the Air Force. In *Growing Points in Educational Research.* American Educational Research Association official report, 1949. Pp. 193–201.
37. Sexton, K. Activities and clubs are of distinct value. *Sch. Act.*, 1952, *24*, 38+.
38. Shannon, J. R. The post-school careers of high school leaders and high school scholars. *Sch. Rev.*, 1929, *37*, 656–665.
39. Shannon, J. R. Student activities and leadership. *Sch. Act.*, 1951, *22*, 183.
40. Silverson, L. E. Debate in California high schools. *Calif. J. sec. Educ.*, 1952, *27*, 456–460.
41. Smith, G. B. Carry over between types of extra-curricular activities in which high school and university students participate. *Educ. Adm. Supervis.*, 1937, *23*, 307–311.
42. Smith, M., & Nystrom, W. C. A study of social participation and of leisure time of leaders and non-leaders. *J. appl. Psychol.*, 1937, *21*, 251–259.
43. Stogdill, R. M. Personal factors associated with leadership: a survey of the literature. *J. Psychol.*, 1948, *25*, 35–71.
44. Trump, J. L. *High School Extracurriculum Activities.* Chicago: Univ. of Chicago Press, 1944.
45. Trump, J. L. Extracurricular activities improve life adjustment. *Educ. Leadership*, 1954, *11*, 428–433.
46. Tunis, J. R. *Was college worth while?* New York: Harcourt Brace, 1936.
47. Walters, R. Scholastic training of eminent engineers. *Sch. & Soc.*, 1921, *13*, 322–329.
48. Wickert, F. (Ed.) *Psychological Research on Problems of Redistribution.* Washington, D. C.: U. S. Government Printing Office, 1947. (Army Air Forces Aviation Psychology Program, report No. 14.)
49. Williams, R. H. Athletics: springboard to good citizenship. *Tex. Outlook*, October 1953, *37*, 9.
50. Williams, S. B., & Leavitt, H. J. Group opinion as a predictor of military leadership. *J. consult. Psychol.*, 1947, *11*, 283–291.
51. Youngert, E. Contribution of athletics to the education of high school youth. *Nat. Ass. sec. Sch. Prin. Bull.*, 1954, *38*, 78–85.
52. Zeleny, L. Characteristics of group leaders. *Sociol. soc. Res.*, 1939, *24*, 140–149.
53. *Assessment of Men: Selection of Personnel for the Office of Strategic Services.* Office of Strategic Services, Assessment Staff. New York: Rinehart, 1948.
54. *Officer Selection Procedures: Bibliography.* Washington: Adjutant General's Office, Personnel Research Section. Project No. PR 4061, July, 1945.
55. *Quarterly Report of Training Analysis and Development*, May 16, 1954–August 15, 1954, Project 54-4, 3700th Military Training Wing, Lackland Air Force Base, San Antonio, Texas.
56. *Summary of Selected Research Studies Concerning Leadership.* Washington: Office of the Air Surgeon, Medical Research Division, Psychological Branch. Aviation Psychology Abstract Series, No. 190, 1945.
57. We've been asked who gets in service academies. *U. S. News*, August 24, 1951, *31*, 64.

NEW YORK CONFERENCE ON RETIREMENT PLANNING

The role colleges can play in retirement planning and counseling was the subject of New York University's twelfth annual Higher Education Conference December 8. Dr. Carroll V. Newsom, president of NYU, keynoted the Conference with his talk "A Challenge to Higher Education." He was followed by four panel discussions on specific areas where the college can be effective. Dean Russell F. W. Smith led a panel discussion on "General Adult Education as a Preparation for Retirement." Professor John Carr Duff's panel covered "Training for Leadership in Working with Older People." Aaron Feinsot of NYU was chairman of the panel on "Services to Business, Industry, Government and Community in Retirement Planning and Counseling." Discussion of "Research on Aging" was led by Professor Harry A. Charipper.

The Conference was sponsored by the department of higher education in cooperation with the University's Division of General Education, department of adult education, Office of Special Services to Business and Industry, and All-University Committee on Problems of the Aging.

A Series on In-Service Training

COUNSELORS ARE coming to feel more and more strongly that systematic continuous, in-service training is necessary if they are to maintain their competence on a high level or to increase their skills. The techniques utilized are most varied but they seem to have in common exchange of experience, joint evaluation of work, and consideration of new developments on a group basis. Because of this continuous need for and interest in in-service training, the *Journal* will devote a page in each of a number of subsequent issues to specific in-service training techniques. The series editor is Barbara Kirk, Manager, Counseling Center, University of California, Berkeley 4, California, who invites readers to submit descriptions of techniques which have actually been put into effect and other material directly related to in-service training. Technique descriptions should be limited to 750 words and should identify the specific setting in which the technique was utilized.

The in-service techniques that will be described are in a sense *how-to-do-it* attempts. Yet, it is hoped, they will be more than this. If our expectations are appropriate the various contributions should reflect

- The kind of administrative and supervisory atmosphere congenial to continue staff growth.
- The need for a planned approach to in-service training needs.
- The means by which staffs identify their own in-service training needs.
- The interrelationship between underlying theory and practice as exemplified in the specific case.
- The many and varied techniques possible to be utilized by staff for this purpose.

The references listed below were furnished by Barbara Kirk.

Attention is called also to the list of in-service training materials assembled by Bernard R. Black and published in the January, 1956, issue of the *Journal*.—JOSEPH SAMLER.

Bibliography

1. Berdie, Ralph F., & Haganah, Theda. A training program in counseling. *Amer. Psychol.*, 1950, *5*, 140–142.
2. Berdie, Ralph F., Ed. *Counseling and the college program.* Minneapolis: Univer. Minnesota Press, 1954. (Minn. Stud. Student Personn. Wk. No. 6.) 58 pp.
3. Bledsoe, Ernestine. Counselors plan in-service training. *Occupations*, 1952, *7*, 495–499.
4. Collins, Duane. An in-service training program for residence counselors. *Educ. psychol. measmt.*, 1947, *7*, 647. (An abstract.)
5. Failor, Clarence W., & Williams, H. Edgar. Carrying guidance training out to Colorado schools. *Personnel Guid. J.*, 1953, *6*, 380–383.
6. Gilbert, William M. Training faculty counselors at the University of Illinois. In Williamson, E. G., Ed. *Trends in student personnel work*, Minneapolis: Univer. Minnesota Press, 1949.
7. Hardee, Melvene D. A Program of in-service training for teacher-counselors. *Junior Coll. J.*, 1950, *20*, 453–459.
8. Hitchcock, William L. Counselors feel they should. *Personnel Guid. J.*, 1953, *32*, 72–74.
9. Kirk, Barbara A. Techniques of in-service counselor training. *Personnel Guid. J.*, 1955, 4.
10. Samler, Joseph. Professional Training. *Personnel Guid. J.*, 1952, *1*, 15–19.
11. Wellman, Frank E. Utilizing a community occupational survey for in-service education. *Personnel Guid. J.*, 1954, *8*, 477–479.

Fellowships, Scholarships, and Assistantships For Guidance and Personnel Graduate Training

GEORGE D. CHANGARIS

THIS REPORT is the first of a series of annual articles on fellowships, scholarships, and assistantships available to graduate students in the fields of guidance and personnel services including counseling and counseling psychology. Data were collected by means of a questionnaire mailed to the institutions listed in "Course Offerings in Guidance and Student Personnel Work, Summer 1956 and Academic Year 1956–57," published by the U. S. Office of Education.

The two-page questionnaire was mailed to 263 schools of which 185 responded. Of the respondents, 127 offered financial assistance and are included in the main body of this report.

The entries for each of the institutions present information on the following points:

1. Name and address of institution.

2. Application for admission to graduate study. The name of the official or person to whom application for admission is made appears first and in some instances in the same person who receives applications for financial assistance.

3. Tuition. Tuition figures are given for the academic year unless otherwise noted. In some instances, tuition is given for the quarter when applicable or for a semester hour, unit, or credit. Nonresident charges are noted where this information has been provided.

4. Fellowships (abbreviated as "Fellows"): When a definite number is not stated, the reported institution has either omitted this information or stated that a "variable" number were available. Amount of stipend is stated as a definite amount or reported as a range including the lowest and highest amounts. If the graduate student is required to work as a condition of receiving an award, this is stated in hours per week. The notation that tuition and fees are exempt appears in each entry when the institution so reported. The official or person to whom an applicant should write for information about an award appears with the deadline date for receiving applications, if supplied. Some schools stated that there was no definite deadline; others did not respond to this question. Awards are available to first-year students unless otherwise stated.

5. Scholarships (abbreviated as "Scholars"). Same as 4 above.

6. Assistantships (abbreviated as "Assists"). Same as 4 above.

7. Part-time work. Only non-availability of part-time work on campus is noted.

8. Degrees. When furnished, the specific areas of concentration are given for the Master of Arts or Science ("Master's") and for the Doctor of Education or Doctor of Philosophy ("Doctorate"). If no areas or fields were reported, only the degrees offered are included.

The Table following the entries summarizes additional information on all institutions for which information is presented below and, in addition, reports on those schools that completed the questionnaire even though they do not provide financial assistance.

ALFRED UNIVERSITY, Alfred, N. Y. *Apply for Admis:* Joseph Seidlin, Dean, Grad School, Aug 15. *Tuition:* $700. *Scholars:* 2 or more; tuition, fees exempt; apply Dr. Seidlin, Apr 15. *Assists:* 2 or more; tuition, fees exempt; 10 hrs wrk; apply Dr. Seidlin, Apr 15. Master's.

ALLEGHENY COLLEGE, Meadville, Pa. *Apply for Admis:* Julian Ross, Dean Instruction, Sept 1. *Tuition:* $23/cr hr. *Assists:* 1 Grad Intern, $200/mo, tuition, fees exempt; apply Charles W. McCracken, Dean Students, Apr 30. Master's, Guid. Counseling.

AMERICAN UNIVERSITY, THE, Washington, D. C. *Apply for Admis:* Charles K. Trueblood, Chmn, Dept

GEORGE D. CHANGARIS is Administrative Assistant of the American Personnel and Guidance Association, Washington, D. C. The author thanks JAMES RIDDLE for his indispensable contribution toward the completion of this article.

Psych, Aug 15. *Tuition:* $17/cr hr. *Fellows:* 4, $1200, free tuition 2 courses, fees exempt; first-year students not eligible; apply Dean, Grad School, Mar 15. *Assists:* 10, $360, free tuition 4 courses, fees exempt; 12 hrs wrk; apply Dean, Grad School, Mar 15. Master's & Doctorate, Guid, Counseling.

APPALACHIAN STATE TEACHERS COLLEGE, Boone, N. C. *Apply for Admis:* Herbert Wey, Assoc Dean, Grad School, Sept 1. *Tuition:* $75/quarter. *Assists:* 8, $600–$900, tuition, fees not exempt; 20 hrs wrk; apply Dir, Grad School, Sept 1. Master's, Counseling.

ARIZONA STATE COLLEGE, Tempe, Ariz. *Apply for Admis:* Irving W. Stout, Dir, Grad Study, July 1. *Tuition:* Resident, fees only; Nonres $350 plus fees. *Fellows:* Apply Robert A. Heimann, College of Education, Aug. 1. *Scholars:* 2 Grad, $500, tuition, fees exempt; 15 hrs wrk; apply Dr. Heimann, Aug 1. *Assists:* Grad student helpers, tuition, fees not exempt, $15/20 hrs wrk; apply Dr. Heimann, Aug 1. No part-time jobs. Master's, Guid; Doctorate, Guid & Counseling.

ARKANSAS, UNIVERSITY OF, Fayetteville. *Apply for Admis:* Dean, Grad School, and C. A. Cole, Student Counseling Service, Aug 1. *Tuition:* Resident $150, Nonres $350. *Assists:* $600–$700, non-res tuition exempt, fees not exempt; apply V. W. Adkisson, Dean, Grad School. Master's, Doctorate.

ATLANTA UNIVERSITY, Atlanta 14, Ga. *Apply for Admis:* Paul I. Clifford, Registrar, Aug 15. *Tuition:* $300. *Scholars:* 5, $300–$500, tuition, fees exempt; apply Dr. Clifford, April 15. Master's, Guid & Counseling.

BALL STATE TEACHERS COLLEGE, Muncie, Ind. *Apply for Admis:* Robert Koenker, Dir, Grad Studies. *Tuition:* Resident $37/quarter, nonres $57/quarter. *Scholars:* tuition only; Apply Robert Primmer, Dir Scholarships, Aids & Grants, Mar 1. *Assists:* 1, $1200; 20 hrs wrk; apply Dir Counseling & Testing Center, Mar 1. Master's Doctorate, Counseling & Guid.

BOSTON COLLEGE, Chestnut Hill 67, Mass. *Apply for Admis:* Paul A. Fitzgerald, S.J., Dean, Grad School, Mar 1. *Tuition:* $700. *Fellows:* 1, $1200–$1500, tuition, fees exempt; 6 hrs wrk; apply Rev. Fitzgerald, Mar 15. *Assists:* 4, $1100, tuition, fees not exempt; 10 hrs wrk; apply Rev. Fitzgerald, Mar 15. Master's, Guid; Doctorate, Guid & Measurements.

BOSTON UNIVERSITY, Boston 15, Mass. *Apply for Admis:* Dugald S. Arbuckle, School of Education. *Tuition:* $700. *Fellows: Counseling Psych,* 4, $1200, tuition, fees exempt; first-year students not eligible; apply John Gilmore, Dept Psych; *Guid & Counseling,* $1200, tuition, fees exempt; first-year students not eligible; apply Dr. Arbuckle. *Scholars: Dorm Scholarships,* Room, board & tuition; 20 hrs wrk; apply Dr. Arbuckle; *Rehab Counseling,* 10 or more, $1800, tuition, fees not exempt; no wrk; apply Dr. Arbuckle. *Assists: Counseling Psych,* 11, tuition, fees exempt; 15 hrs wrk; apply Dr. Arbuckle; *Guid & Counseling,* tuition, fees exempt; 15 hrs wrk; apply Dr. Arbuckle. Master's, Guid & Counseling; Doctorate, Counseling Psych, Guid & Counseling.

BRIDGEPORT, UNIVERSITY OF, Bridgeport, Conn. *Apply for Admis:* Arthur Trippensee, Dean, Education, Aug 1. *Tuition:* $600; $17.50/cr hr. *Fellows:* 2, $500, tuition exempt; 20 hrs wrk; apply Committee on Fellowships, College of Education, May 1. Master's, Guid.

BRIGHAM YOUNG UNIVERSITY, Provo, Utah. *Apply for Admis:* Dean, Grad School, Sept 1. *Tuition:* $210. *Assists:* 4, $1200, tuition, fees not exempt; 20 hrs wrk; apply Burton Robinson, July 1. Master's, Personnel & Guid.

BUCKNELL UNIVERSITY, Lewisburg, Pa. *Apply for Admis:* W. H. Sauvain, Chmn Committee for Advanced Degrees, July 15. *Tuition:* Nonres $850. *Fellows:* 5, tuition, fees exempt, apply Karl Hartzell, Apr 1. Master's.

BUFFALO, UNIVERSITY OF, Buffalo 14, N. Y. *Department of Psychology: Apply for Admis:* Henry M. Woodburn, Dean, Grad School Arts & Science; Olive P. Lester, Chmn, Dept Psych, Mar 15. *Tuition:* $700. *Scholars:* Amount varies, tuition exempt; apply Henry M. Woodburn, Mar 15. *Assists:* 13, $500–$1000, tuition exempt, fees not exempt; 10–20 hrs wrk; apply Dr. Lester, Mar 15. Master's & Doctorate, Counseling Psych. *School of Education: Apply for Admis:* Leo Goldman, Aug 1. *Tuition:* $700. *Fellows:* 12, Rehab Counseling, $1600, tuition, fees not exempt; apply Robert Rossberg, Mar 15. *Scholars:* 1, max $1000, tuition, fees not exempt; apply Dr. Goldman, Mar 15. *Assists:* 6, $1200, tuition exempt, fees not exempt; 20 hrs wrk; apply Dr. Goldman, Mar 15. Master's & Doctorate, Guid & Student Personnel.

CALIFORNIA, UNIVERSITY OF, Berkeley 4. *Apply for Admis:* M. A. Stewart, Grad Div, July 16. *Tuition:* Resident none, Nonres $300. *Fellows, Scholars:* Tuition, fees not exempt, no wrk; apply Dean Grad Division, Feb 7. *Assists:* counseling positions available, tuition, fees not exempt; apply C. P. Froehlich, School of Educ. Master's & Doctorate, Student Personnel, Counseling Psych.

CALIFORNIA, UNIVERSITY OF, Los Angeles 24. *School of Education: Apply for Admis:* Dean, Grad Division, July 1. *Tuition:* Resident none, Nonres $300. *Assists:* 2, $1800, tuition, fees not exempt; 20 hrs wrk; apply Dean, Dept Education, July 1. Master's, School Psychometrist, School Guid; Doctorate, School Psychologist, Pupil Personnel, Counselor Training. *Department of Psychology: Apply for Admis:* Head, Dept Psych, Aug 1. *Tuition:* Resident none, Nonres $300. *Stipends:* 12, $1600, tuition, fees not exempt, apply Dept Psych, Feb 20. *Scholars:* apply Grad Division, Feb 20. Assists: 1–2, $1575; 10–20 hrs wrk; apply Dept Psych, Feb 20. Master's & Doctorate, Counseling Psych.

CATHOLIC UNIVERSITY OF AMERICA, Washington 17, D. C. *Apply for Admis:* Dean appropriate school, month prior to entrance. *Tuition:* $20/cr hr. *Fellows:* apply Roy J. Deferrari, Secretary General, Chmn, Committee on Fellowships, Scholarships, & Student Aid, Feb 1. *Scholars:* Counseling, 7, room & board or tuition, fees not exempt; 20 hrs wrk; women preferred, apply Dr. Deferrari, Feb 1. *Assists:* Counseling, 2, $1560, 20 hrs wrk, apply Head Dept, Feb 1. Master's & Doctorate.

CENTRAL MISSOURI STATE COLLEGE, Warrensburg. *Apply for Admis:* Reid Hemphill, Chmn, Grad Committee. *Tuition:* $75 incidental fee. *Assists:* 1, $450; 15 hrs wrk; apply Dr. Hemphill. Master's, Counseling & Guid.

CENTRAL WASHINGTON COLLEGE OF EDUCATION, Ellensburg. *Apply for Admis:* J. Wesley Crum, Dean Instruction, month prior to entrance. *Tuition:* none. *Assists:* 8, $900, 10 hrs wrk; apply Dr. Crum, April 1. Master's, Guid.

CINCINNATI, UNIVERSITY OF, TEACHERS COLLEGE, Cincinnati 21, Ohio. *Apply for Admis:* Carter V. Good, Dir Grad Studies, Sept 15. *Tuition:* Resident $330, Nonres $465. *Fellows:* $200, tuition exempt; apply Dr. Good, Apr 15. *Assists:* $500, tuition exempt; first-year students not eligible, apply Dr. Good, Apr 15. Master's & Doctorate, Personnel Services, Counseling.

CLARK UNIVERSITY, Worcester, Mass. *Apply for Admis:* Vernon Jones, Chmn, Dept Education, Aug 30. *Tuition:* $600. *Scholars:* 2, $600, tuition exempt, apply Dr. Jones, June 30. Master's, Educ & Vocational Guid.

COLGATE UNIVERSITY, Hamilton, N. Y. (Men.) *Apply for Admis:* Strang Lawson, Chmn, Grad Studies, June. *Fellows:* 8, $1400, tuition exempt, fees not exempt; 20 hrs wrk; apply Glen Waas, Feb. Master's, Guid, School Counseling.

COLORADO A & M COLLEGE, Fort Collins. *Apply for Admis:* Walter R. Horlacher, Grad School, June 1. *Tuition:* Resident $183, Nonres $240. *Assists:* 6, Resident hall counselor, $100/mo, tuition exempt, fees not exempt; 20 hrs wrk; apply Courtlyn W. Hotchkiss, Dir Housing, May 1. Master's.

COLORADO, UNIVERSITY OF, Boulder. *Apply for Admis:* Clarence W. Failor, College of Education, July. *Tuition:* Resident $22, Nonres $348. *Fellows:* Research, $1800, tuition exempt, fees not exempt; University, $1200, tuition exempt, fees not exempt; apply Dean, Grad School, Mar 1. *Scholars:* 80, tuition exempt, fees not exempt, apply Dean, Grad School, Mar 1. *Assists:* tuition reduced to resident tuition, fees not exempt; apply Dir, College Education, Mar 1. Master's & Doctorate, Guid & Personnel.

COLUMBIA UNIVERSITY, TEACHERS COLLEGE, New York 27, N. Y. *Apply for Admis:* Office of Admissions, Aug 1. *Tuition:* $25/cr, $868/acad yr. *Fellows, Scholars:* $1000–$2000, tuition, fees not exempt; apply F. H. Hagemeyer, Registrar, Dec 31. *Assists:* apply Head Appropriate Dept, Dec 31. Master's & Doctorate, Student Personnel Admin, Guid, Voc Counseling; Doctorate, Counseling Psych & Rehab Counseling.

CONNECTICUT, UNIVERSITY OF, Storrs. *Apply for Admis:* Edward A. Wicas, School of Education. *Tuition:* Resident $75, Nonres $200. *Assists:* 2, $1327, tuition, fees not exempt; 20 hrs wrk; first-year students not eligible; apply School Educ. Master's & Doctorate, Counseling, Guid & Personnel.

CORNELL UNIVERSITY, Ithaca, N. Y. *Apply for Admis:* A. Gordon Nelson, School Education, May 15. *Tuition:* $300. *Fellows:* $1850–$2800, tuition, fees not exempt; apply John McConnell, Dean, Grad School, Feb 15. *Scholars:* $300–$850, tuition, fees not exempt; apply Dr. McConnell, Feb 15. *Assists:* 35, $1800–$2400, tuition exempt, fees not exempt, 20 hrs wrk; apply Dr. Nelson, Feb 15. Master's & Doctorate, Guid & Personnel.

DELAWARE, UNIVERSITY OF, Newark. *Apply for Admis:* C. J. Rees, Dean, School of Grad Studies, Aug. *Tuition:* $13/cr hr. *Assists:* Men preferred for Dorm Counselors; apply Dr. Rees. Master's, Guid.

DENVER, UNIVERSITY OF, Denver 10, Colo. *Apply for Admis:* Dean, Grad College, Sept 1. *Tuition:* $14/cr hr. *Fellows:* apply Daniel D. Feder, Dean Students, & Harold E. Moore, Dir School of Education, June 1. Master's & Doctorate.

DETROIT, UNIVERSITY OF, Detroit 21, Mich. *Department of Psychology:* (Men.) *Apply for Admis, Fellows, Assists:* Allan P. Farrell, S.J. *Tuition:* $15/cr hr. *Fellows:* 5, $1150, tuition exempt, fees not exempt; 18–20 hrs wrk; apply Apr 1. *Assists:* 1 or 2, $650, tuition, fees not exempt; 9 hrs wrk; apply Apr 1. Master's. *Department of Education: Apply for Admis:* Claude Nemzak, Chmn, Education Dept, Aug 14. *Tuition:* $15/cr hr. *Fellows:* $1050–$1150/9 mos; tuition exempt; 20 hrs wrk; apply A. P. Farrell, S.J., Dean, Grad School, Mar 15. *Assists:* $650/9 mos; apply Dr. Farrell, Mar 15. Master's.

DUKE UNIVERSITY, Durham, N. C. *Apply for Admis:* Dean, Grad School, Aug 1. *Tuition:* $570. *Fellows, Scholars, Assists:* $1000–$1500, tuition and fees not exempt; 6–9 hrs wrk with assists; apply Dean, Grad School, Mar 1. Master's and Doctorate.

DUQUESNE UNIVERSITY, Pittsburgh 19, Pa. *Apply for Admis:* Dean, Grad School. *Tuition:* $625/grad program. *Assists:* 2, $1200/12 mos, tuition exempt, fees not exempt; 38 hrs wrk; apply Dean, Grad School, Mar 1. Master's, Guid, Counseling.

EAST TEXAS STATE COLLEGE, Commerce. *Apply for Admis:* Dean, Grad School, July 30. *Tuition:* Resident $88, Nonres $198. *Assists:* 2, $1200, tuition, fees not exempt; 20 hrs wrk; apply William E. Truax, Jr., May 1; *other assists,* House Fellow, room, board & tuition, apply Head, Division of Research & Health. Master's, Guid.

EASTERN ILLINOIS STATE COLLEGE, Charleston. *Apply for Admis:* R. D. Anfinson, Dean Students, or E. K. Lawson, Dean Women, Sept 1. *Tuition:* Resident $141.40, Nonres $261.40. *Assists:* 2 men, 2 women, board & room, $40/mo; 10 hrs wrk; apply Dr. Anfinson or Dr. Lawson, May 15. Master's, Guid.

EASTERN MICHIGAN COLLEGE, Ypsilanti. *Apply for Admis:* Dir Grad Division, Sept 1. *Tuition:* Resident $245, Nonres $381. *Assists:* 2, $950, tuition, fees not exempt; 20 hrs wrk; apply Dir Grad Division, 3 mos prior to entrance. Master's.

EASTERN NEW MEXICO UNIVERSITY, Portales. *Apply for Admis:* J. W. Mears, Dean of Personnel, Sept 1. *Tuition:* Resident $50, Nonres $100. *Assists:* 2, $1000; 20 hrs wrk; apply Dr. Mears, July 1. Master's, Personnel Services.

FLORIDA STATE UNIVERSITY, Tallahassee. *Apply for Admis:* Ernest Carson, Head, Grad Study, School of Educ, Aug 21. *Tuition:* Resident none, Nonres $350. *Fellows:* $750–$900, tuition exempt, apply Dean, Grad School, early spring. *Assists:* 2, $1350, tuition exempt, 8 hrs wrk; 1, $450, tuition exempt, 4 hrs wrk; apply Dr. Carson. Master's & Doctorate, Guid.

FLORIDA, UNIVERSITY OF, Gainesville. *Apply for Admis:* Dir of Admissions, Aug 1. *Tuition:* Resident $75 per sem, Nonres $250 per sem. *Fellows:* $100–$125 per mo, out-of-state tuition exempt, fees not exempt; apply Robert O. Stripling, Head Personnel Service Dept, Mar 1. *Scholars:* $125/mo, out-of-state tuition exempt, fees not exempt; apply Dr. Stripling, Mar 1. *Assists:* $133/mo, out-of-state tuition exempt, fees not exempt; apply Dr. Stripling, Mar 1. Master's, Rehab Counseling; Master's & Doctorate, Guid & Personnel.

FORDHAM UNIVERSITY, SCHOOL OF EDUCATION, New York, N. Y. *Apply for Admis:* William A. Kelly, Chmn, Div of Educ, Psych, Measurements & Guid,

June 1. *Tuition:* $25/cr hr. *Scholars:* 3; tuition exempt, fees not exempt; apply James S. Donnelly, Dean, Feb 15. *Assists:* 3; $800, tuition exempt, fees not exempt; 15 hrs wrk; apply Dr. Donnelly, Feb 15. Master's & Doctorate, Guid.

FORT HAYS KANSAS STATE COLLEGE, Hays. *Apply for Admis:* Ralph V. Coder, Dean, Grad Div, Aug 1. *Tuition:* Resident $55, Nonres $92. *Fellows:* 4; $500, tuition and fees not exempt; 12 hrs wrk; apply W. C. Wood, Educ, Joseph B. Ray, Psych, Mar 1. Master's, School Counseling.

GEORGE PEABODY COLLEGE FOR TEACHERS, Nashville 5, Tenn. *Apply for Admis:* Nicholas Hobbs, Chmn, Div of Human Development & Guid, Apr 1. *Tuition:* $10/cr hr. *Fellows:* 5; $2400, tuition, fees not exempt; apply Dr. Hobbs, Feb 15. *Scholars:* 5; $300–$700, tuition, fees not exempt; apply Dr. Hobbs, Feb 15. *Assists:* $1500, tuition, fees not exempt; 10 hrs wrk; apply Dr. Hobbs, Feb 15. Master's, Guid; Doctorate, Counseling.

GEORGE WASHINGTON UNIVERSITY, Washington 6, D. C. *Apply for Admis:* Dir of Admis, July 1. *Tuition:* $17/cr hr. *Fellows:* 8; $1600, tuition, fees not exempt; apply Thelma Hunt, Executive Officer, Dept Psych, July 1. *Assists:* 6; $75 per semester, tuition, fees not exempt; 6 hrs wrk; apply Dr. Hunt, July 1. Master's & Doctorate, Guid, Counseling Psych.

HARDIN-SIMMONS UNIVERSITY, Abilene, Tex. *Apply for Admis:* J. B. Adair, Dir Grad Studies. *Tuition:* $12/cr hr. *Fellows:* 6; $585, tuition not exempt; apply Dr. Adair, Apr 15. Master's.

HARVARD UNIVERSITY, Cambridge 38, Mass. *Apply for Admis:* David V. Tiedeman, Peabody House, 13 Kirkland St. *Tuition:* $800. *Scholars:* 15; $2000, tuition, fees not exempt; apply Prof. Tiedeman, Apr 1. *Assists:* 2; $3600, tuition, fees not exempt; first-year students not eligible; apply Prof. Tiedeman, Apr 1. Master's, School Counseling, Doctorate, Counseling, Psych, Director of Guid, Dean of Students.

IDAHO STATE COLLEGE, Pocatello. *Apply for Admis:* Clarence C. Moore, Educ Dept. *Tuition:* Resident $112.50, Nonres $262.50. *Assists:* 8; $187.50, tuition, fees not exempt; 5 hrs wrk; apply Dr. Moore. Master's.

IDAHO, UNIVERSITY OF, Moscow. *Apply for Admis:* Eugene Giles, Psych Dept. *Tuition:* none. *Assists:* 1–2; $900, fees exempt; 10–20 hrs wrk; apply Psych Dept, or Student Counseling Center, May 31. Master's, Guid.

ILLINOIS STATE NORMAL UNIVERSITY, Normal. *Apply for Admis:* Dept of Educ & Psych. *Tuition:* Resident $90, Nonres $180. *Assists:* 1, $100/mo, tuition, fees not exempt; 60 hrs mo; apply Dean of University, Mar 1. Master's, Counseling.

ILLINOIS, UNIVERSITY OF, Urbana. *Apply for Admis:* F. H. Finch, College of Educ, early applications recommended. *Tuition:* Resident $130, Nonres $550. *Fellows:* $1200, tuition, fees exempt; apply Frederick T. Wall, Feb 15. *Assists:* $1500–$2000, tuition, fees exempt; 20 hrs wrk; first-year students not considered; apply Dr. Finch. Master's, Doctorate.

INDIANA UNIVERSITY, Bloomington. *Apply for Admis:* Howard Batchelder, Assoc Dean, School of Educ. *Tuition:* Resident $6/cr hr, Nonres $14.25/cr hr. *Fellows:* $1000, resident tuition exempt; apply Dean, School of Educ, Feb 15. *Assists:* $750–$1200, resident tuition, fees exempt; 15 hr wrk; apply Dean, School of Educ, Feb 15.. *Counseling Assists:* 85, room, board, remission of fees; approx 20 hr wrk; apply Dir of Counseling & Activities, Men's & Women's Halls, Feb 1. Master's & Doctorate, Guid.

IOWA STATE TEACHERS COLLEGE, Cedar Falls. *Apply for Admis:* Registrar, Sept 10. *Tuition:* $65/quarter. *Assists:* 10; $900–$1500, tuition exempt; 10 hrs wrk. Apply M. J. Nelson, Dean of Instruction, Mar 1. Master's, Guid, Counseling.

IOWA STATE UNIVERSITY OF, Iowa City. *Apply for Admis:* E. T. Peterson, Dean, College of Educ, Aug. *Tuition:* Resident $102, Nonres $152. *Fellows:* $30–$60/mo, tuition, fees exempt; apply Dr. Peterson, Mar 1. *Scholars:* Tuition, fees exempt; apply Dr. Peterson, Mar 1. *Assists:* $100–$160/mo, 20 hrs wrk; $40–$70/mo, 10 hrs wrk; apply Dr. Peterson, Mar 1. Master's & Doctorate, Counseling & Guid, Personnel & Industrial Psych.

JOHN CARROLL UNIVERSITY, Cleveland 18, Ohio. (Men.) *Apply for Admis:* H. F. Bukenhauer, Dir Grad Div, Sept 1. *Tuition:* $17/cr hr. *Fellows:* 1, $1800–$2000, tuition, fees exempt; 20 hrs wrk; apply Dr. Bukenhauer, Mar 1. Master's, Guid & Counseling.

JOHNS HOPKINS UNIVERSITY, Baltimore 19, Md. *Apply for Admis:* Chmn, Dept of Educ, Mar 1. *Tuition:* $400 for MA & PHD, $15/cr hr. *Fellows:* 1, $1000, tuition, fees exempt; apply Chmn, Dept of Educ, Mar 1. Scholars; 2, $500–$600, tuition, fees exempt; apply Chmn Dept of Educ, Mar 1. *Assists:* 1, $600, tuition, fees exempt; 10 hrs wrk; apply Chmn, Dept of Educ, Mar 1. Master's & Doctorate, Guid.

KANSAS CITY, UNIVERSITY OF, Kansas City, Mo. *Tuition:* $16/cr hr. *Psychology Dept: Apply for Admis:* Psych Dept, Sept 15. *Fellows:* 4; $800, tuition exempt, fees not exempt; 20 hrs wrk; apply Robert G. Neel, Chmn Psych Dept, May 31. *Scholars:* amount varies, tuition, fees not exempt; apply Dean of Students, May 31. *Assists:* 1; $.75–$1.00/hr, tuition, fees not exempt; 10–20 hrs wrk; apply Dean of Students or Psych Dept, May 31. Master's, Counseling. *Education Dept: Apply for Admis:* School of Educ, Mar. *Fellows:* 2; $1000, tuition, fees exempt; 20 hrs wrk; apply Hugh W. Speer, Dean, School of Educ. Master's & Doctorate, Personnel, Guid.

KANSAS STATE COLLEGE, Manhattan. *Apply for Admis:* Harold Howe, Grad School, Apr 1. *Tuition:* Resident $180, Nonres $300. *Assists:* 6, $1350; 20 hrs wrk; apply Dean Howe, Mar 1. Master's, Guid & Counseling Student Personnel, Counseling Psych.

KANSAS STATE TEACHERS COLLEGE, Emporia. *Apply for Admis:* Merrit Sanders, Head, Dept of Psych, Don Davis, Head, Dept of Educ, Aug 1. *Tuition:* Resident $57, Nonres $94. *Fellows:* 1 or 2; $500, tuition, fees not exempt; 40 hrs/mo; apply Orville L. Eaton, Dir, Grad Div, Apr 1. *Assists:* 1 or 2, $50–$80/mo, tuition, fees not exempt; apply Dr. Eaton, Apr 1. Master's, Guid & Counseling.

KANSAS, UNIVERSITY OF, Lawrence. *Apply for Admis:* John H. Nelson, Dean, Grad School. *Tuition:* Resident $115, Nonres $240. *Fellows:* 35; $915–$1240; 6 hrs wrk; apply Dean Nelson, Mar 1. First-year students not eligible. *Scholars:* 25; $715–$940; 6 hrs wrk; apply Dean Nelson, Mar 1. *Assists:* 10; 20 hrs wrk; apply Kenneth E. Anderson, Dean, School of Educ, Mar 1. Master's & Doctorate, Counseling, Guid; Master's Rehab Counseling.

KENT STATE UNIVERSITY, Kent, Ohio. *Apply for Admis:* R. M. Clark, Dean, Grad School. *Tuition:* Resident $50, Nonres $85. *Fellows:* 1, $500, tuition, summer fees exempt; 3 hrs wrk per day; apply D. L. Arnold, Prof Educ, Aug 1. *Assists:* 1, $400, tuition exempt; apply Prof. Arnold, Aug 1. Master's, Counseling & Guid.

KENTUCKY, UNIVERSITY OF, Lexington. *Apply for Admis:* Office of Admission, June 15. *Tuition:* $7.50/cr hr. *Assists:* 5, $1500; tuition, fees not exempt; 20 hrs wrk; apply Charles F. Elton, Dir University Counseling Services, Apr 1. Master's, Doctorate.

LONG ISLAND UNIVERSITY, Extension, Brooklyn 1, N. Y. *Apply for Admis:* Jacob I. Hartstein, Head, Dept of Educ. *Tuition:* $640. *Assists:* 1, $800, tuition, fees exempt; 20 hrs wrk; apply Dr. Hartstein, Apr 1. Master's, Guid.

LOUISIANA STATE UNIVERSITY, Baton Rouge. *Apply for Admis:* Dept of Educ. *Tuition:* Resident $30, Nonres $60. *Assists:* 6, $900, tuition, fees exempt; 12 hrs wrk; apply Head, Dept of Educ. Master's, Doctorate.

LOYOLA COLLEGE, Baltimore 10, Md. *Apply for Admis:* Chmn, Dept of Educ, Sept 1. *Tuition:* Nonres $15. *Scholars:* tuition; apply Dean, Grad Div, Sept 1. Master's, Guid.

LOYOLA UNIVERSITY, Chicago 11, Ill. *Apply for Admis:* Chmn, Dept of Educ, Aug 1. *Tuition:* $500. *Fellows, Scholars, Assists:* $900, tuition exempt, fees not exempt; first-year students not eligible for Fellows and Scholars; apply appropriate Dept, Apr 1. Master's Doctorate.

MACMURRAY COLLEGE, Jacksonville, Ill. *Apply for Admis:* W. S. Dysinger, Mar 15. *Tuition:* $15/cr hr. *Scholars:* 6, $100–$600, tuition, fees not exempt; apply Chmn, Dept of Psych, Mar 15. *Assists:* 3, $1286, tuition, fees exempt; 10 hrs wrk; apply Chmn, Dept of Psych, Mar 15. Master's.

MARYLAND, UNIVERSITY OF, College Park. *Apply for Admis:* Gladys Wiggin, month prior to registration. *Tuition:* $10/cr hr. *Fellows:* $675, tuition, fees exempt; first-year students not eligible; apply Chmn, Fellowship & Assistantship Committee, Mar. *Assists:* $1350, tuition, fees exempt; first-year students not eligible; apply Chmn, Fellowship & Assistantship Committee, Mar. Master's & Doctorate, Guid & Personnel.

MARYWOOD COLLEGE, Scranton, Pa. (Women.) *Apply for Admis:* Chmn, Grad Div, June. *Tuition:* $500. *Scholars:* 1, tuition exempt; apply Chmn, Grad Div, May. *Assists:* 2, $200, tuition, fees not exempt; apply Dean, May. Master's.

MASSACHUSETTS, UNIVERSITY OF, Amherst. *Apply for Admis:* Dean Grad School, June 1. *Tuition:* Resident $100, Nonres $220. *Fellows:* 3, $1400, tuition exempt; 20 hrs wrk; apply Claude C. Neet, Head, Dept of Psych, June 1. *Assists:* 3, $500–$2200, tuition exempt; 15–20 hrs wrk; apply Dr. Neet, June 1. Master's & Doctorate, Guid & Counseling.

MIAMI, UNIVERSITY OF, Coral Gables 46, Fla. *Apply for Admis:* Riis Owre, Dean Grad School, Sept 5. *Tuition:* $325/sem for 12–15 grad crs, $27.50/cr hr. *Fellows:* 4, $1000; 6 hrs teaching; apply Dr. Owre, Mar 15. Master's, Guid & Counseling.

MICHIGAN STATE UNIVERSITY, East Lansing. *Apply for Admis:* C. E. Erickson, Dean, College of Educ, Aug 15. *Tuition:* Resident $68, Nonres, $143. *Scholars:* 20, $1600–$2000, tuition, fees not exempt; apply Gregory Miller, Dept Administration & Educational Services, Apr 1. *Assists:* 3–5, $1800, tuition, fees not exempt (out of state tuition is waived); apply Walter F. Johnson, Dept of Admin & Educ Serv, Apr 1. Master's, School Diagnostician; Master's & Doctorate, Counseling & Guid, College Personnel, Rehab Counseling.

MICHIGAN, UNIVERSITY OF, Ann Arbor. *Apply for Admis:* Dir of Admissions, Rackham School of Grad Study, Aug 15 for nonres, Sept 1 for residents. *Tuition:* Residents $200, Nonres $470. *Fellows:* 60, $1550–$1800, tuition, fees not exempt, apply Horace H. Rackham School of Grad Studies, Feb 15. *Scholars:* Tuition exempt, fees not exempt, apply Rackham School of Grad Studies, Feb 15. *Assists:* Amount varies, apply Dean W. C. Olson, School of Education, Feb 15. Master's & Doctorate, Guid & Counseling.

MILLS COLLEGE, Oakland 13, Calif. (Women.) *Apply for Admis:* Barbara Garcia, Dir of Grad Study, Apr 1. *Tuition:* $370. *Fellows:* 3, room & board, tuition, fees exempt; 20 hrs wrk; apply Dr. Garcia, Mar 15. Master's, Counseling, Guid.

MINNESOTA, UNIVERSITY OF, Minneapolis. *College of Education: Apply for Admis:* Dean, Grad School, Sept 1. *Tuition:* Resident $46/quarter, Nonres $135/quarter. *Rehab Counselor Traineeships:* 10–12, $1600, tuition, fees not exempt; Apply John G. Darley, Grad School. *VA Traineeships:* 3–5, $3670 half time; $5400 full time; tuition, fees not exempt; apply C. Gilbert Wrenn, College of Educ. *Assists:* 15–20, $800–$1600, tuition, fees not exempt; apply Marcia Edwards, College of Educ. Master's & Doctorate, School Counseling, Counseling Psych, Rehab Counseling, Student Personnel. *Department of Psychology: Apply for Admis:* Dean, Grad School, Sept 1. *Fellows:* 15–20, OVR; $1600–$2800, tuition, fees not exempt; apply L. H. Lofquist, Dept of Psych, Feb 15. *VA Traineeships:* 12, $3670 half time; $5440 full time; tuition, fees not exempt; first year students not eligible; apply R. F. Berdie, Dir, Student Counseling Bureau, Feb 15. *Assists:* 12–15; $797–$1593, tuition, fees not exempt: 10–20 hrs wrk; apply W. A. Russell, Dept of Psych, Feb 15. Master's & Doctorate, Voc Counseling, Guid, Personnel.

MISSISSIPPI SOUTHERN COLLEGE, Hattiesburg. *Apply for Admis:* Dean, Grad Council, Sept 7. *Tuition:* Resident $59, Nonres $66. *Fellows:* 6, $800, tuition not exempt, fees exempt for out-of-state candidates; 10 hrs wrk; apply Dean, Grad Council, Mar 15. *Scholars:* 8, $400, tuition not exempt, fees for out-of-state candidates exempt; apply Dean, Grad Council, Mar 15. Master's, Administrative Personnel & Counseling.

MISSOURI, UNIVERSITY OF, Columbia. *Apply for Admis:* Chmn, Educ or Psych Dept, May 1. *Tuition:* fees $160. *Fellows:* $700, fees not exempt; first-year students not eligible; apply Dean, Grad Faculty, Mar 1. *Scholars:* $500, fees not exempt; apply Dean, Grad Faculty, Mar 1. *Assists:* $1250–$1500, fees not exempt; 20 hrs wrk; apply L. G. Townsend, Chmn, Dept of Educ, R. S. Daniel, Chmn, Dept of Psych, May 1. Master's & Doctorate, Guid & Counseling, Counseling Psych.

MONTANA STATE UNIVERSITY, Missoula. *Apply for Admis:* Gordon B. Castle, Dean, Grad School. *Tuition:* Resident $64, Nonres $114. *Assists:* $1200, resident candidate $40/quarter remitted, nonresident candidate $90/quarter remitted; 15 hrs wrk;

apply L. J. Clareton, Dean, School of Educ. Master's & Doctorate.

NEBRASKA, UNIVERSITY OF, Lincoln. *Apply for Admis:* Charles O. Neidt, Chmn, Dept of Educational Psych & Measurements, May 1. *Tuition:* Resident $90, Nonres $180. *Fellows:* Tuition to $1500 + tuition; apply Dean, Grad School, Mar 1. *Assists:* 2–4; $900, tuition exempt, fees not exempt; 12 hrs wrk; apply Dr. Neidt, May 1. Master's, Guid, Counseling.

NEW HAMPSHIRE, UNIVERSITY OF, Durham. *Apply for Admis:* John F. Reed, Dean, Grad School. *Tuition:* Resident $300, Nonres $600. *Scholars:* 20, tuition, fees exempt; apply Dean Reed, Apr 1. *Assists:* 1, $1200; apply Herbert A. Carroll, Chmn, Dept of Psych, Apr 1. Master's.

NEW JERSEY STATE TEACHERS COLLEGE, Upper Montclair. *Apply for Admis:* Dir of Personnel, Earl C. Davis. *Tuition:* Resident $11.50/cr hr, Nonres $13.50/cr hr. *Fellows:* 3, tuition, fees exempt, room & board; 15 hrs counseling; apply Dir of Personnel, July 1. Master's, Personnel & Guid.

NEW MEXICO HIGHLANDS UNIVERSITY, Las Vegas. *Apply for Admis:* Anna Martin, Head, Dept of Psych. *Tuition:* Resident $55, Nonres $90/quarter. *Assists:* 6, tuition, fees exempt; apply Dr. Martin, spring. Master's.

NEW YORK UNIVERSITY, New York City 3. *Apply for Admis:* Bernard Kalirkowitz, Grad Psych Dept, Mar 1. *Tuition:* $25/cr hr. *Fellows:* 4, $1600, 18 hrs tuition exempt; apply Dir Admissions, Grad School, Mar 1. *Scholars:* 15, $750; apply Dir Admissions, Grad School, Mar 1. *Assists:* 12, $1400–$1600, 18 cr hrs, tuition exempt; 8–16 hrs wrk; apply Brewster Smith, Mar 1. Master's, Doctorate, Counseling Psych.

NIAGARA UNIVERSITY, Niagara, N. Y. *Apply for Admis:* Joseph A. McBride, CM, Dean, Grad School, Aug 15. *Tuition:* $21/cr hr. *Fellows:* 15, tuition, fees exempt; 40 hrs wrk; apply Rev McBride, Mar 15. Master's, Guid & Counseling.

NORTH CAROLINA COLLEGE AT DURHAM, Durham. *Apply for Admis:* Registrar, Sept 1. *Tuition:* Resident $5.25/cr hr, Nonres $16.50/cr hr. *Assists:* $450, apply Richard K. Barksdale, Vice-Dean, Grad School, Sept 1.

NORTH CAROLINA STATE COLLEGE, Raleigh. *Apply for Admis:* Roy N. Anderson, Head, Dept of Occupational Information & Guid, 30 days before entrance. *Tuition:* Resident $150, Nonres $500. *Scholars:* 15, $1600, tuition, fees exempt; apply Dr. Anderson. Master's, Occupational Information & Guid, Rehab Counseling.

NORTH CAROLINA, UNIVERSITY OF, Chapel Hill. *Apply for Admis:* Dean Grad School, Sept 17. *Tuition:* Resident $75/sem, Nonres $250/sem. *Internships:* 2, $520, tuition, fees not exempt; 15 hrs wrk; apply to Dir, Univeristy Testing Serv. *Assists:* 3, $1000, tuition, fees not exempt; 20 hrs wrk; first-year students not eligible; apply Dir, University Testing Serv. Master's, Personnel Administration; Doctorate, Guid.

NORTH TEXAS STATE COLLEGE, Denton. *Apply for Admis:* Dean, Grad School, Aug 1, *Tuition:* Resident $40, Nonres $150. *Assists:* 4, $675, tuition, fees not exempt; apply Dean, School of Educ, June 1. Master's, Counseling & Guid; Doctorate, Counseling.

NORTHERN ILLINOIS STATE COLLEGE, Dekalb. *Apply for Admis:* Robert Hainds, Dean, Grad School. *Tuition:* Resident $110, Nonres $200. *Assists:* $150, tuition, fees exempt; apply Dr. Hainds. Master's, Counseling & Guid.

NORTHERN STATE TEACHERS COLLEGE, Aberdeen, S. Dak. *Apply for Admis:* Dr. Heming, Dir, Grad Studies, Aug. *Tuition:* Resident $108, Nonres $180. *Assists:* 2, $150/mo, tuition, fees not exempt; apply W. J. Jerde, Mar 1. Master's.

NORTHWESTERN UNIVERSITY, Evanston, Ill. *Apply for Admis:* Moody Prior, Dean, Grad School. *Tuition:* $795. *Fellows:* Amount varies; tuition, fees exempt; apply Dean Prior, Mar 15. First-year students not eligible. *Scholars:* Amount varies; tuition, fees exempt; apply Dean Prior, Mar 15. *Assists:* 1, $1000, tuition, fees exempt; first-year students not eligible; apply Frank W. Miller, School of Educ, Mar 15. Master's & Doctorate, Guid & Personnel.

NOTRE DAME, UNIVERSITY OF, Notre Dame, Ind. (Men.) *Apply for Admis:* Paul E. Beichner, C.S.C., Dean, Grad School, Mar 15. *Tuition:* $375. *Fellows:* apply Rev. Beichner, Mar 15. *Scholars:* Tuition. Master's & Doctorate, Educ & Voc Guid.

OCCIDENTAL COLLEGE, Los Angeles 41, Calif. *Apply for Admis:* Chmn, Dept. of Psych, Mar 15. *Tuition:* $350. *Scholars:* 1, full tuition, fees not exempt; apply Ben Cully, Dean of Men, Mar 15. Master's, Counseling Psych.

OHIO STATE UNIVERSITY, Columbus 10. *Apply for Admis:* Entrance Board, Mar 1. *Tuition:* Resident $75/quarter, Nonres $200/quarter. *Fellows:* 3, $1800, nonresident tuition exempt; apply Dean, Grad School, Feb 15. *Scholars:* 4, $900, nonresident tuition exempt; apply Dean, Grad School, Feb. 15. *Assists:* 59, $1200–$1800, nonresident tuition exempt; 5–20 hrs wrk; apply H. F. Burtt, Dept of Psych, Earl Anderson, Dept Educ, Feb 15. Master's, Rehab, Dormitory, & School Counseling; Doctorate, Counseling Psych, Guid.

OHIO UNIVERSITY, Athens. *Apply for Admis:* Dean, Grad College, Mar 1. *Tuition:* Resident $220, Nonres $470. *Assists:* 17, $1500, tuition, fees exempt; 18 hrs wrk; apply Dean, Grad College, Mar 1. Master's, Guid, Personnel Services.

OKLAHOMA A & M COLLEGE, Stillwater. *Apply for Admis:* Dean Grad School. *Tuition:* Resident $7.00/cr hr, Nonres $11.00/cr hr. $132 max. *Assists:* 3, tuition, fees exempt; 10 hrs wrk, apply W. J. Griffith, Jr., Head, Dept of Psych, Mar 1. Master's & Doctorate, Guid, Counseling.

OMAHA, UNIVERSITY OF, Omaha, Nebr. *Apply for Admis:* Dr. Robbins, Dir of Grad Div, Sept 1. *Tuition:* Resident $8/cr hr, Nonres $14/cr hr. *Internships:* 3, $600–$1200, tuition exempt for 6 hrs; 20–30 hrs wrk; apply Gale Oleson, July 1. Master's, Guid.

OREGON STATE COLLEGE, Corvallis. *Apply for Admis:* F. R. Zeran, School of Educ. *Tuition:* $65. *Assists:* 1, $1200, tuition, fees not exempt; 6–9 hrs wrk; apply Dean Zeran, Mar 15. First-year students not eligible. Master's & Doctorate, Guid.

OREGON, UNIVERSITY OF, Eugene. *Apply for Admis:* Dir of Admissions. *Tuition:* $195. *Fellows:* 2, $1200–$1600, tuition exempt, fees reduced; 12 hrs wrk; first-year students not eligible; apply Grad School, Mar 15. *Assists:* 6, $900–$1400, tuition exempt, fees reduced; 12 hrs wrk; apply Grad School, Mar 15. *VA Traineeships:* counseling

psych; $1800–$4000; 20 hrs wrk; *Rehab Counselors Traineeships:* $1600, for students in two year program. Master's & Doctorate.

PENNSYLVANIA STATE UNIVERSITY, University Park. *Apply for Admis:* Dean, Grad School, Sept 1. *Tuition:* Resident $280, Nonres $530. *Fellows:* 2, (VA Traineeships) $2400, tuition, fees exempt; work hours vary; apply Dean, College of Educ, Mar 1. *Scholars:* 12 (Federal & State Rehab Traineeships), $600–$1200; 20 hrs wrk; apply Dean, College of Educ, Mar 1. Master's, Counseling Psych, School Guid Counseling, College Personnel, Vocational Rehab Counseling; Doctorate, Counseling Psych, School Guid Administration, College Personnel Administration, Voc Rehab Specialist.

PENNSYLVANIA, UNIVERSITY OF, Philadelphia 4. *Apply for Admis:* Dean Grad School, Bennett Hall. *Tuition:* $800. *Fellows:* $1000, tuition exempt, fees not exempt; apply Dean Grad School, Feb 20. *Scholars:* To $400, tuition exempt, fees not exempt; apply Dean Grad School, Feb 20. *Assists:* $1000, tuition exempt, fees not exempt; 20 hrs wrk; apply Chmn, Dept Psych. Master's, Guid, Counseling, Dean; Doctorate, Counseling Psych, Personnel Services, Guid.

PURDUE UNIVERSITY, Lafayette, Ind. *Apply for Admis:* John Hadley, Dept of Psych, Elizabeth K. Wilson, Dept of Educ, Apr 1. *Tuition:* Resident $100, Nonres $287.50. *Fellows:* 3–5, $1000, tuition exempt, fees exempt except for $32; apply Dean, Grad School, Mar 15. *Scholars:* open; tuition exempt; fees exempt except for $100; apply Dean, Grad School, Mar 15. *Assists:* 20, tuition exempt; fees exempt except $32; apply Dean, Grad School, Mar 15. Master's & Doctorate, Counseling, Guid & Personnel.

RICHMOND, UNIVERSITY OF, Richmond, Va. *Apply for Admis:* B. C. Holtzclaw, Apr. 1. *Tuition:* Resident none, Nonres $530. *Fellows:* 1, $300–$1200, tuition, fees not exempt; apply Dr. Holtzclaw, Mar 1. *Scholars:* 1–3, $150, tuition, fees not exempt; apply Dr. Holtzclaw, Mar 1. Master's.

SACRAMENTO STATE COLLEGE, Sacramento 19, Calif. *Apply for Admis:* Office of Admissions, Sept. *Tuition:* Resident $60, Nonres $240. *Scholars:* 2, $200; apply Chmn, Committee on Loans, Scholarships & Awards, Apr 15. *Assists:* $.90–$1.25/hr; apply Chmn, Comm Loans, Scholarships & Awards, Apr 15. Master's.

SAN DIEGO STATE COLLEGE, San Diego 15, Calif. *Apply for Admis:* Dean Grad Div, Aug 1. *Tuition:* Resident $22/sem; Nonres $90/sem. *Scholars:* 6, $50–$400, tuition, fees not exempt; apply Assoc Dean of Student Activities, Oct 15. Master's, Pupil Counseling.

SAN JOSE STATE COLLEGE, San Jose, Calif. *Apply for Admis:* Admissions Officer. *Tuition:* Resident $20/academic year, Nonres $6/cr hr. *Fellows:* 8–12, $50–$500, tuition, fees not exempt; work hours vary; apply Grad Study Coordinator, Apr 15. *Assists:* 8–12, $200–$1800, tuition, fees not exempt; work hours vary; apply Grad Study Coordinator, Apr 15.

SCRANTON, UNIVERSITY OF, Scranton 3, Pa. *Apply for Admis:* Registrar, Sept 1. *Tuition:* $18/cr hr. *Scholars:* 1, tuition exempt; apply Lawrence J. Lennon, Chmn, Dept of Educ, Aug 1. Master's, Guid.

SYRACUSE UNIVERSITY, Syracuse 10, N. Y. *Apply for Admis:* M. Eunice Hilton, Dir, Student Personnel Work, Mar 1. *Tuition:* $30/cr hr. *Fellows:* 1, $1800, tuition exempt; apply Virgil Rogers, Mar 1. *Scholars:* 5, tuition exempt; apply Dean Rogers, Mar 1. *Assists:* 109 total: 40 women student deans, room & board, tuition exempt; 20 hrs wrk; apply M. Eunice Hilton, Feb 1. 4 Grad Assistants, $1200–$1800, 6 cr hrs tuition exempt; 20 hrs wrk; apply Dean Rogers, Mar 1. 65 dormitory proctors, room, room & board, 9 cr hrs, tuition exempt; apply Jim G. Carleton, Dir Men's Housing, Mar 1. Master's & Doctorate, Student Personnel, Guid, Counseling.

SOUTHERN CALIFORNIA, UNIVERSITY OF, University Park, Los Angeles 7. *Apply for Admis:* Registrar. *Tuition:* $20/cr hr. *Assists:* 14, $1000, tuition, fees not exempt; apply Dean, School of Educ. *Vocational Counselors:* 6, $200/mo; 20 hrs wrk; open to doctoral candidates. Master's & Doctorate, Guid.

SOUTHERN ILLINOIS UNIVERSITY, Carbondale. *Apply for Admis:* E. D. Fitzpatrick, Chmn, Dept of Guid, Aug 1. *Tuition:* $34/quarter. *Fellows:* 4, $110/mo, tuition, fees exempt; 10 hrs wrk; apply Willis Swartz, Dean Grad School, June 1. *Scholars:* 8 (resident counselors), $90/mo, tuition, fees exempt; 20 hrs wrk; apply Maude Stewart, Assoc Prof. Dept of Guid, June 1. *Assists:* 2, $180/mo, tuition, fees exempt; 20 hrs wrk; apply Dr. Fitzpatrick, June 1. Master's, Guid & Counseling, College Student Personnel.

SOUTHWEST TEXAS STATE TEACHERS COLLEGE, San Marcos, Tex. *Apply for Admis:* Claude Elliot, Dean Grad Studies. *Tuition:* Resident $48/sem, Nonres $150/year. *Head Residents:* $125–$150; preference given to married grad students. *Assistant Residents:* $50–$60/mo; apply M. O. Juel, Dean of Students, J. W. Stone, Assoc Dean of Students, Apr 1. Master's, Counseling, Guid.

SPRINGFIELD COLLEGE, Springfield 9, Mass. *Apply for Admis:* Dir of Grad Studies. Tuition: $600. *Scholars:* apply R. William Cherry, Chmn, Scholarship Committee. *Assists:* 5, $330, tuition, fees not exempt; 6 hrs wrk; apply Seth Arsenian, Chmn, Guid & Personnel Services, May 1. Master's, Guid & Personnel Services.

ST. JOHN'S UNIVERSITY, Brooklyn, N. Y. *Apply for Admis:* Daniel C. Sullivan, Chmn, Grad Dept of Educ, 6 weeks prior to registration. *Tuition:* $23/cr hr. *Scholars:* 3, tuition, fees exempt; first-year students not eligible; apply Frederick Easterly, Dean, School of Educ, Apr 15. Master's & Doctorate, Elem & Sec School Guid, Collegiate Personnel Services.

TEMPLE UNIVERSITY, Philadelphia 22, Pa. *Apply for Admis:* Chmn, Dept of Psych. *Tuition:* $20/cr hr. *Assists:* 12, $1400, tuition, fees exempt; 20 hrs wrk; apply Chmn, Dept of Psych. Doctorate, Counseling.

TEXAS CHRISTIAN UNIVERSITY, Fort Worth. *Apply for Admis:* Otto R. Nielson, Dean School of Educ, July 1. *Tuition:* $13/cr hr. *Scholars:* 5, $200; apply T. F. Richardson, Chmn, Scholarship Committee, July 1. Master's.

TEXAS TECHNOLOGICAL COLLEGE, Lubbock. *Apply for Admis:* Dept of Psych. *Tuition:* Resident $50, Nonres $300. *Fellows:* 15 (Rehab Counselor Traineeships), $1600, tuition, fees not exempt; apply Robert P. Anderson, Apr 1. *Assists:* 1, $1000, tu-

ition, fees not exempt; 60 hrs wrk/mo; apply Sylvan J. Kaplan, Apr 1. Master's, Rehab & School Counseling; Doctorate, Counseling Psych.

TUFTS UNIVERSITY, Medford 55, Mass. *Apply for Admis:* Dept of Educ, May. *Tuition:* $750. *Fellows:* 1, $2000, tuition, fees exempt except $10 registration fee; apply D. W. Marshall, Chmn, Dept of Educ, Mar 1. *Scholars:* 1, full tuition, fees exempt except for $10 registration fee; apply Dr. Marshall, Mar 1. Master's, Guid.

UTAH STATE AGRICULTURE COLLEGE, Logan. *Apply for Admis:* Dean Grad School, July. *Tuition:* $157, if a graduate assistant, otherwise $262. *Assists:* 4, $450, tuition exempt for out-of-state candidates; 10 hrs wrk; apply Arden Frandson, Dept of Psych, June 1. Master's, Guid.

UTAH, UNIVERSITY OF, Salt Lake City. (Predominantly men.) *Apply for Admis:* Claude W. Grant, Head, Dept of Psych, Aug 1. *Tuition:* Resident $170, Nonres $320. *Fellows:* 2–5, $1600, tuition, fees not exempt; 20 hrs wrk; apply Dr. Grant, Mar 1. *Scholars:* 10, $1600, tuition, fees not exempt; apply Dr. Grant, Mar 1. *Assists:* 5, $900–$1200, tuition, fees not exempt; 20 hrs wrk; apply Dr. Grant, Mar 1. Master's, School & Rehab Counseling; Doctorate, Counseling Psych, Counseling, College Personnel.

VANDERBILT UNIVERSITY, Nashville, Tenn. (Men.) *Apply for Admis:* S. C. Ericksen, Mar 1. *Tuition:* $180/quarter. *Fellows:* 2, $1000–$2800, tuition, fees not exempt; 10 hrs wrk; apply, Dean, Grad School, Feb 15. *Scholars:* 2, $1000–$1800, tuition, fees not exempt, apply Dean, Grad School, Feb 15. *Assists:* 4, $1000–$1400, tuition, fees not exempt; 10–15 hrs wrk; apply Dean, Grad School, Feb. 15. Master's & Doctorate, Counseling.

VIRGINIA STATE COLLEGE, Petersburg. *Apply for Admis:* John M. Hunter, Dir Div Grad Studies and Research, month prior to registration. *Tuition:* Resident $255, Nonres $395. *Assists:* 1, $300–$500, tuition, fees not exempt; apply Dr. Hunter, Aug 1. Master's, Guid & Personnel Services.

VIRGINIA, UNIVERSITY OF, Charlottesville. *Apply for Admis:* Dean, School of Educ, Sept 15. *Tuition:* Resident $180, Nonres $360. *Fellows:* $300–$600; tuition, fees not exempt; 2 hrs wrk; first-year students not eligible; apply Dean, School of Educ, Apr 1. *Scholars:* Apply Dean. School of Educ, Apr 1. *Assists:* 1, $1200; 10 hrs wrk; first-year students not eligible; apply Dean, School of Educ, Apr 1. Master's & Doctorate, Guid, Counseling.

WASHINGTON, STATE COLLEGE OF, Pullman. *Apply for Admis:* James H. Elder, Chmn, Dept of Psych, Sept 1. *Tuition:* Resident $60, Nonres $200. *Assists:* 10–15, $1400–$1800, tuition and fees not exempt; 20 hrs wrk; apply Dr. Elder, Mar 15. Doctorate, Counseling Psych.

WASHINGTON, UNIVERSITY OF, Seattle 5. *Apply for Admis:* Henry A. Burd, Acting Dean Grad School, July 15. *Tuition:* Resident $75, Nonres $225. *Fellows:* $150/mo, tuition, fees exempt; 20 hrs wrk; first-year students not eligible; apply Francis F. Powers, Dean, College of Educ, Apr 15. *Assists:* $1.25/hr, tuition, fees not exempt; 10–20 hrs wrk; apply Dr. Powers, Apr 15. Master's & Doctorate, Guid & Counseling.

WEST VIRGINIA UNIVERSITY, Morgantown. *Apply for Admis:* R. Dustman, Dean, Grad School. *Tuition:* Resident $90, Nonres $440. *Assists:* 5, tuition, fees not exempt; apply E. K. Feaster, previous semester. Master's & Doctorate.

WESTERN ILLINOIS STATE COLLEGE, Macomb. *Apply for Admis:* L. M. Schleier, Dir Grad Div, Sept 1. *Tuition:* Resident $102, Nonres $192. *Assists:* 1, $1350, tuition, fees not exempt; 20 hrs wrk; apply John S. Story, Apr 30. Master's, Counseling & Guid.

WESTERN MICHIGAN COLLEGE, Kalamazoo, Michigan. *Apply for Admis:* George G. Mallinson, Dean, School Grad Studies, Sept 20. *Tuition:* Resident $96.50, Nonres $150. *Fellows:* 10, $750, tuition not exempt, fees exempt; 15 hrs wrk; apply Dr. Mallinson, Mar 1. Master's, Guid, Counseling.

WESTERN WASHINGTON COLLEGE OF EDUCATION, Bellingham. *Apply for Admis:* Irwin A. Hammer, Chmn, Div of Grad Studies, before opening of quarter. *Tuition:* none. *Fellows:* 3, $900, fees not exempt; apply Dr. Hammer, Feb 1. *Assists:* $900, fees not exempt; apply Dr. Hammer, Feb 1. Master's, Guid.

WILLIAM AND MARY, COLLEGE OF, Williamsburg, Va. *Apply for Admis:* George Oliver, Head, Dept of Educ, Aug 15. *Tuition:* Resident $292, Nonres $582. *Assists:* 2, $900, 10 hrs wrk; apply Dr. Oliver, Aug 1. Master's.

WYOMING, UNIVERSITY OF, Laramie. *Apply for Admis:* R. H. Bruce, Dean, Grad School. *Tuition:* Resident $200, Nonres $410. *Fellows:* $999–$1791, tuition exempt; fees partially exempt; apply Dean Bruce, Mar 1. *Assists:* 1–3, $1200–$1800, tuition exempt; apply Lyle L. Miller, Chmn, Guid and Special Educ, Mar 1. Master's, Guid, Counseling; Doctorate, Guid, Personnel Services, Counseling.

XAVIER UNIVERSITY, Cincinnati 7, Ohio. *Apply for Admis:* Grad Div, Sept 17. *Tuition:* $15/cr hr. *Scholars:* 6, tuition exempt, fees not exempt; apply Dean, Grad Div, Apr 1. Master's, Guid, Personnel.

TABLE 1

Requirements for Admission to Guidance and Personnel Graduate Training

Institution	Dept. Offering Degree		Minimum Undergrad Sem Hours		Specific Undergraduate Course Requirements For Admission					Tests		Other Requirements
	Education	Psychology	Education	Psychology	Guidance, Counseling	Tests & Measurements	Statistics	Educational Psychology	Elementary Psychology	Graduate Record Examination	Miller Analogies Test	*General course requirements are abbreviated as follows: SS (Social Science), PS (Physical Science), BS (Biological Science), M (Mathematics), FL (Foreign Language). Numbers refer to semester hours.*
Akron, U., Akron 4, Ohio	X	..	30	9	..	2	..	3	3	..	..	A.C.E., 12 SS, 3 PS, 3 BS, 2 M.
Alfred U.	X	X	12	24	..	..	..	3	3	X	X	.....
Allegheny Coll.	X	..	..	..	..	3	3	3	6	..	..	.....
American U.	..	X	12	12	..	3	3	3	3	..	..	Liberal arts training. 9 SS, 3 PS, 3 BS.
Appalachian St. Tchrs. Coll.	X	..	12	6	..	..	..	..	..	..	..	Tchng. certif., 1 yr. tch. exp., Natl. Tchrs. Exam.
Arizona St. Coll.	X	..	24	..	..	..	..	..	..	X	..	.....
Arkansas, U.	X	..	18	3	..	..	..	..	..	..	X	Battery of advisory exams.
Atlanta U.	X	..	24	12	6	3	3	6	6	X	..	6 SS, 6 PS, 12 BS, 6 M, 12 FL.
Ball St. Tchrs. Coll.	X	..	..	..	..	..	..	..	..	..	..	Ohio St. Psych. Exam., Coop. Engl. Test.
Boston Coll.	X	..	18	..	3	3	..	3	..	X	..	Local screening exam.
Boston U.												
Education	X	..	..	..	3	3	..	3	3	..	..	Word Assoc. Test.
Psychology	..	X	..	10	..	..	3	..	10	X or X		
Bridgeport, U.	X	..	9	..	..	..	..	..	..	..	..	.....
Brigham Young U.	X	X	..	..	..	..	..	..	..	X	..	.....
Bucknell U.	X	..	18	3	..	..	..	3	3	..	..	.....
Buffalo, U.												
Education	X	..	..	6	..	..	..	..	2	X	X	4 additional psych.
Psychology	..	X	..	20	..	3	3	..	6	X	X	6 experim., 3 social, 3 abnormal psych.
California, U. (Berkeley)	X	..	..	..	..	..	..	..	..	..	X	Confidential battery.
California, U. (LA)												
Education	X	..	12	6	..	3	..	6	6	X	..	.....
Psychology	..	X	..	30	..	3	..	..	6	X	..	.....
Canisius Coll., Buffalo, N. Y.	X	..	12	..	..	..	..	2	..	X	..	.....
Catholic U. of America	X	X	..	..	..	..	..	..	..	..	..	Qualifying exam. in psych. dept.
Central Missouri St. Coll.	X	..	18	12	..	3	..	3	3	..	..	Natl. Tchrs. Exam.
Central Washington Coll. of Educ.	X	..	16	9	..	..	..	..	..	..	..	.....
Cincinnati, U. Tchrs. Coll.	X	..	9	6	..	..	..	..	..	X	X	Coop. Engl. Test.
Clark U.	X	..	9	6	..	..	..	..	..	..	..	.....
Colgate U.	X	X	6	..	..	..	..	..	..	X	X	.....
Colorado A. & M. Coll.	X	X	..	..	2	2	2	2	..	X	..	20 combined in psych. and educ., 2 mental hygiene.
Colorado St. Coll. of Educ.	X	..	20	16	..	..	..	2	..	X	..	Coop. Engl. Test. 6 SS, 2 PS, 2 BS.
Colorado, U.	X	..	18	6	..	3	..	..	..	..	X	6 growth & development, 6 SS. Exploratory test.

Institution	Dept. Offering Degree		Minimum Undergrad Sem Hours		Specific Undergraduate Course Requirements For Admission						Tests		Other Requirements
	Education	Psychology	Education	Psychology	Guidance, Counseling	Tests & Measurements	Statistics	Educational Psychology	Elementary Psychology	Graduate Record Examination	Miller Analogies Test		General course requirements are abbreviated as follows: SS (Social Science), PS (Physical Science), BS (Biological Science), M (Mathematics), FL (Foreign Language). Numbers refer to semester hours.
Columbia U. Tchrs. Coll.	X	X	..	..	..	..	..	..	..	X	..		Full credentials required; individual consideration.
Connecticut, U.	X	..	12	9	..	3	3	3	3	..	X		3–6 personality and mental hygiene, 3–6 sociology.
Cornell U.	X	..	..	6	..	..	..	3	3	..	X		Reading test.
Delaware, U.	X	X	18	9	..	..	..	..	3	..	..		.....
Denver, U.	X	X	10	15	..	..	..	..	7	X	..		C.A.V.D. 3 experimental psych.
Detroit, U.													
Education	X	..	20	..	..	..	..	..	..	X	..		.....
Psychology	..	X	..	18	..	..	2	..	2	X	..		2 experimental and 2 rational psych. Language exam. in French or German.
Duke U.	X	..	12	..	..	..	..	..	..	X	X		.....
Duquesne U.	X	..	6	6	..	2	2	3	3	..	..		9 SS, 3 PS, 3 BS.
East Texas St. Coll.	X	..	24	24	..	..	..	3	3	..	X		.....
Eastern Illinois St. Coll.	X	X	..	..	..	3	..	..	..	..	..		5 growth & development; Illinois tchrs. certif.
Eastern Michigan Coll.	X	..	20	6	..	2	..	3	3	..	..		12 SS, 12 PS or BS.
Eastern New Mexico U.	X	X	24	15	3	3	3	3	10	X	..		.....
Florida A&M U.	X	..	21	12	..	3	..	3	3	..	X		Ohio St. Psych. Exam., 4 personal adjustment, 12 SS, 4 PS, 4 BS, 8 M.
Florida St. U.	X	..	12	..	..	..	..	3	..	X	X		.....
Florida, U.	X	..	..	..	..	..	..	..	..	X	X		Course requirements variable.
Fordham U.	X	..	12	..	..	4	..	4	4	..	..		Own qualifying exam., 4 BS, 4 M.
Fort Hays Kansas St. Coll.	X	X	20	20	..	..	..	3	3	..	..		Tchng. certif. Ohio St. Psych. Exam. and Std. Engl. Usage Tests. 10 SS, 5 PS, 5 BS.
Fresno St. Coll.	X	..	15	7	..	..	..	4	3	X	..		.....
George Peabody Coll. for Tchrs.	..	X	18	9	..	..	..	..	..	X	X		.....
George Washington U.	X	X	..	..	3	3	3	..	3	..	..		Degrees in counseling in School of Govt. 6 SS, 6 PS or 8 BS, 12 FL.
Hardin-Simmons U.	X	..	18	18	..	..	..	..	..	..	..		18 SS, 18 PS.
Harvard Grad. Sch. of Educ.	X	..	..	..	..	..	..	..	..	X	..		.....
Idaho St. Coll.	X	..	..	..	..	..	..	..	..	X	..		Tchng. certif.
Idaho, U.	X	X	15	15	3	3	3	3	3	..	..		.....
Illinois St. Normal U.	X	X	20 or	20	..	..	..	3	3	..	..		3 mental hygiene.
Illinois, U.	X	..	16	..	..	..	..	..	..	..	X		.....
Indiana St. Tchrs. Coll., Terre Haute	X	X	28	8	..	..	..	3	3	X	..		.....

Institution	Dept. Offering Degree		Minimum Undergrad Sem Hours		Specific Undergraduate Course Requirements For Admission					Tests		Other Requirements
	Education	Psychology	Education	Psychology	Guidance Counseling	Tests & Measurements	Statistics	Educational Psychology	Elementary Psychology	Graduate Record Examination	Miller Analogies Test	General course requirements are abbreviated as follows: SS (Social Science), PS (Physical Science), BS (Biological Science), M (Mathematics), FL (Foreign Language). Numbers refer to semester hours.
Indiana U.	X	..	..	..	..	..	..	..	..	..	..	Ohio St. Psych. Exam. 10 educ. for those planning to teach.
Iowa St. Tchrs. Coll.	X	X	..	..	..	..	..	..	..	..	X	Gen. professional exam.
Iowa St. U.	X	X	..	..	2	2	3	3	4	..	..	.....
John Carroll U.	X	..	24	12	..	3	3	3	3	..	X	.....
Johns Hopkins U.	X	..	..	..	..	..	..	..	..	..	..	.....
Kansas City, U.												
Education	X	..	10	12	..	3	3	3	3	X	..	.....
Psychology	..	X	..	26	..	3	3	3	3	..	X	3 each in abnormal, child, social, industrial, and history of psych. 6 SS, 3 BS, 3 M. A.C.E.
Kansas St. Coll.	X	X	..	15	..	..	..	..	..	..	X	Educ. dept. requires secondary tchng. certif.
Kansas St. Tchrs. Coll.	X	..	..	..	..	..	..	..	..	..	..	Battery of tests.
Kansas, U.	X	X	15	..	..	..	..	..	..	..	..	.....
Kent St. U.	X	..	..	4	..	2	..	2	2	X	..	Tchng. certif.
Kentucky, U.	X	..	..	7	..	..	..	..	..	X	..	27 in BS, M, and FL.
Long Island U. Grad. Sch.	X	..	18	6	..	..	..	3	6	X	..	.....
Louisiana St. U.	X	..	..	6	..	..	..	..	..	..	..	.....
Loyola Coll., Baltimore, Md.	X	..	12	5	..	..	..	3	2	X	..	.....
Loyola U., Chicago, Ill.	X	X	18	24	..	2	..	..	2	X	X	.....
MacMurray Coll.	..	X	..	24	..	3	..	..	3	..	X	6 SS, 6 PS, 6 BS, 3 FL.
Manhattan Coll.	X	..	18	6	..	..	..	2	2	..	..	2 educ. philosophy.
Maryland, U.	X	X	18	..	..	..	..	..	..	..	X	Engl. test.
Marywood Coll.	X	X	12	12	..	..	..	3	3	X	..	18 SS, 6 PS or BS, 6 M, 6 FL, 12 Engl., 9 philosophy.
Massachusetts, U.	..	X	..	21	..	..	3	..	6	..	..	3 experim. psych.
Miami, U.	X	..	15	..	..	..	..	3	3	X	..	Coop. Engl. Test.
Michigan St. U.	X	X	..	..	..	..	..	..	..	..	X	MSU Educ. Test Battery.
Michigan, U.	X	..	15	..	..	..	..	..	..	..	..	Individual consideration.
Milliken U.	X	..	12	6	..	..	..	3	3	..	..	12 Engl., 12 SS, 8 PS or BS.
Mills Coll.	X	X	..	..	..	..	..	..	..	..	..	Individual consideration.
Minnesota, U.												
Education	X	..	12	4	..	..	..	..	..	..	X	Special graduate test battery.
Psychology	..	X	..	..	..	..	..	..	..	..	..	.....
Mississippi Southern Coll.	X	..	18	6	..	..	..	3	3	..	..	.....
Mississippi St. Coll., St. Coll., Miss.	X	..	18	6	3	..	..	3	3	..	..	.....
Missouri, U.	..	..	15	..	..	..	..	3	3	..	X	.....
Montana St. U.	X	X	16	3	..	..	..	3	3	X	..	.....
Nebraska, U.	..	..	12	12	..	..	..	..	..	..	..	Degrees offered in Dept. of Educ. Psych. and Meas. Local test battery.
New Hampshire, U.	..	X	..	15	..	..	..	..	..	..	..	.....

Institution	Dept. Offering Degree		Minimum Undergrad Sem Hours		Specific Undergraduate Course Requirements For Admission					Tests		Other Requirements
	Education	Psychology	Education	Psychology	Guidance, Counseling	Tests & Measurements	Statistics	Educational Psychology	Elementary Psychology	Graduate Record Examination	Miller Analogies Test	General course requirements are abbreviated as follows: SS (Social Science), PS (Physical Science), BS (Biological Science), M (Mathematics), FL (Foreign Language). Numbers refer to semester hours.
New Jersey St. Tchrs. Coll.	X	..	..	..	..	..	..	..	..	..	..	Tchrs. certif.
New Mexico Highlands U.	..	X	..	48	..	..	..	..	3	..	X	.....
New York U.	..	X	..	12	..	..	..	..	3	..	..	3 experim. psych.
Niagara U.	X	..	34	..	..	..	..	..	..	X	..	.....
N. Carolina Coll. at Durham	X	..	..	..	..	..	..	..	..	X	..	.....
N. Carolina St. Coll.	X	..	..	..	..	..	..	3	3	..	..	6 sociology, 6 econ.
N. Carolina, U.	X	X	18	..	..	..	..	..	..	..	..	Ohio St. Psych. Exam. and Coop. Engl. Tests.
N. Texas St. Coll.	X	X	24 or	24	..	..	..	..	..	..	X	9 SS, 6 PS or BS.
Northeastern U. Coll. Ed.	X	..	12	9	..	..	..	..	..	..	..	.....
Northern Illinois St. Coll.	X	..	..	..	..	..	..	..	..	..	..	.....
Northern St. Tchrs. Coll.	X	..	..	10	..	..	..	..	..	..	..	.....
Northwestern U.	X	..	15	..	..	..	..	..	..	..	..	C.A.V.D.
Notre Dame, U.	..	..	12	6	..	..	..	..	..	X	..	Course requirements variable.
Occidental Coll.	..	X	..	20	..	..	..	..	..	X	X	.....
Ohio St. U.	X	X	14	14	..	..	..	..	..	..	..	Intelligence test.
Ohio U.	X	X	..	..	..	..	..	..	..	..	..	B-undergrad. ave.
Oklahoma A&M Coll.	X	X	..	..	..	..	..	..	..	..	..	Special test battery. Tchng. certif. or equivalent.
Omaha, U.	X	..	15	..	..	..	..	3	3	..	..	.....
Oregon St. Coll.	X	..	..	..	..	..	..	..	..	X	X	Course requirements variable.
Oregon, U.	..	X	..	24	..	4	4	..	6	..	X	.....
Pennsylvania St. U.	X	..	..	..	..	..	..	..	..	..	..	19 educ. and psych.
Pennsylvania, U. Education	X	X	..	..	..	..	..	..	..	..	X	Coop. Gen. Culture Test. Local educ. comprehensive exams.
Psychology	..	X	..	..	..	..	..	..	..	X	..	Undergrad. tng. in gen. psych. and sciences.
Purdue U.	X	X	..	..	..	..	..	..	..	X	..	12 psych. required by psych. dept.
Richmond, U.	X	X	18	18	..	..	..	3	6	..	..	18 SS, 8 PS or 16 BS, 6 M, 12–18 FL.
Sacramento St. Coll.	X	X	..	..	..	..	..	..	..	..	..	A.C.E. and Coop. Engl. Test.
San Diego St. Coll.	X	X	12	6	..	3	..	3	3	..	X	3 growth and development. Coop. Gen. Culture Test.
San Jose St. Coll.	X	X	..	..	..	..	..	..	..	..	X	A.C.E.
Scranton, U.	X	..	12	..	..	..	..	..	..	..	..	Local candidacy exam.
Southern California, U.	X	..	..	..	..	..	..	..	..	X	..	Course requirements variable. Dept. exam.
Southern Illinois U.	..	..	20	5	..	..	..	2	2	X	..	Local Engl. exam.

Institution	Dept. Offering Degree		Minimum Undergrad Sem Hours		Specific Undergraduate Course Requirements For Admission						Tests		Other Requirements
	Education	Psychology	Education	Psychology	Guidance, Counseling	Tests & Measurements	Statistics	Educational Psychology	Elementary Psychology	Graduate Record Examination	Miller Analogies Test		General course requirements are abbreviated as follows: SS (Social Science), PS (Physical Science), BS (Biological Science), M (Mathematics), FL (Foreign Language). Numbers refer to semester hours.
Southwest Texas St. Tchrs. Coll.	X	..	24	..	..	..	..	3	3	..	X		.....
Springfield Coll.	..	..	..	12	..	..	..	..	6	..	..		Degrees offered in Guid. & Pers. Svs. Dept.
St. John's U.	X	..	18	6	..	..	..	4	4	X	..		.....
St. Lawrence, U.	X	..	18	6	..	..	..	..	..	..	..		.....
St. Univ. Coll. for Tchrs., Albany	X	..	18	3	..	..	..	..	..	..	..		N. Y. St. Tchng. certif. requirements.
South Dakota, U.	X	..	12	..	..	..	..	3	..	..	X		Coop. Engl. Test.
Syracuse U.	X	X	..	..	..	..	..	..	..	..	X		C.A.V.D.
Temple U.	..	X	..	12	..	..	..	..	..	X	..		.....
Tennessee, U., Knoxville, Tenn.	X	..	..	..	..	..	..	..	..	..	..		State certif. for tchng.
Texas Christian U.	X	..	24	12	..	3	3	3	3	..	..		12 Engl., 12 SS, 6 BS.
Texas Technological Coll.	..	X	..	12	..	..	3	..	..	X	X		3 physio. psych., 3 govt., 9 educ. and sociology
Texas Western Coll.	X	..	24	..	..	..	..	..	..	X	..		.....
Trinity U.	X	..	18	6	..	3	3	3	3	..	..		6 sociology.
Tufts U.	X	..	6	6	..	..	..	..	..	..	..		.....
Utah St. Agric. Coll.	..	X	..	..	..	..	..	..	..	X	..		20 educ. for guid. degree; 20 psych. for psych. degree.
Utah, U.	X	..	..	..	..	..	..	..	..	X	X		M.M.P.I., Strong Interest Inventory.
Vanderbilt U.	..	X	..	6	..	..	3	3	..	..	X		.....
Virginia St. Coll.	..	..	6	6	..	..	..	..	..	..	..		Degrees awarded in Educ. Psych. and Guid. Dept.
Virginia, U.	X	..	6	6	..	..	..	..	..	..	..		.....
Washington, St. Coll.	..	X	..	24	..	..	3	..	3	..	..		3 experim. psych.
Washington, U.	X	..	13	..	..	..	..	..	..	..	..		.....
West Virginia U.	X	X	20	9	..	..	..	9	..	..	..		8 SS, 8 PS or BS, 12 Engl., 2 art, 2 music, 4 phys. educ., diagnostic tests at W.V. U.
Western Illinois St. Coll.	X	..	..	..	..	..	..	..	..	..	..		16 in educ. and psych. combined.
Western Michigan Coll.	..	..	15	..	..	..	..	..	..	..	..		Degrees awarded in School of Grad. Studies.
Western Washington Coll. of Educ.	X	..	..	..	10	..	2	..	6	3	X		12 SS, 10 science. State certif. and one yr. tchng. experience.
William & Mary, Coll.	X	..	12	..	..	..	..	..	..	..	..		.....
Wyoming, U.	X	..	16	6	..	2	..	2	2	X	X		Coop. Engl. Test. 8 econ. and sociology.
Xavier U.	X	..	..	..	..	..	..	..	..	..	X		12 in educ. and gen. psych.

Fascinating Features

of the 1957 APGA Convention, Detroit, April 14–18.

Dynamic Detroit with:

- the world's busiest waterway
- ships of the seven seas
- pushbutton marvels of automation
- Canada due south (that's right—*south*)
- the world's largest industrial concentration
- living history at Greenfield Village
- sculptures by Milles, architecture by Saarinen
- parks, museums, zoos, playgrounds, drama, music
- urban imagination—hundreds of millions in neighborhood housing, civic buildings, expressways, and parking
- every kind of sports tailored to your taste
- the world's largest and most beautiful shopping center
- wonderful people with midwest warmth and hospitality

Perfect Program

- Personnel Leaders in Big Business
- Personnel Leaders in Big Labor
- World's Largest Assembly of Guidance Leaders
- Latest and Greatest Research in Guidance and Personnel Work
- Refined Tools and Techniques
- Up-to-the-second Philosophy
- Balance; small, medium, and large groups
- Authoritative addresses, stimulating discussions
- New information and materials
- Fastidious planning

Tiptop Tours

- transportation furnished free, minimum of footpounding
- admission free, all tours
- industrial personnel policies explained
- Sunday afternoon (April 14); Greenfield Village
- Wednesday afternoon (April 17); Chrysler, Ford, General Motors

Attend the 1957 APGA Convention
April 14 to 18
Detroit, Michigan

From the Executive Secretary . . .

January 1, 1957 stands as a point of considerable prominence in APGA. Another page of this issue shows that on December 17, 1956 the Association had as many current members as were on the rolls at the end of the 1955–1956 fiscal year. Now on January 1 we have surpassed any previous level of membership. With four months remaining in this fiscal year, there is every possibility that the membership will pass the 9,000 mark and it can very well come to 10,000.

As announced in the November *Journal,* new members may join APGA at any time during the year and their memberships will be dated for twelve months from the date of application. Continuous billing started after the end of the last fiscal year and we now have members who will be renewing in each month from June on. The largest number of members will, of course, be renewing on May 1, but even in October, 296 members will renew next year.

There have been big increases in state memberships. New York is the only state that has passed the 1,000 mark. Several others, however (California, Illinois, Michigan, Ohio, and Pennsylvania) now have more than 400 members and several of these should near 1,000 before the end of the year.

APGA stretches around the world with members in Cuba, British Guiana, Turkey, New Caledonia, India, Egypt, Brazil, England, Germany, Japan, The Philippines, Puerto Rico, Scotland, Venezuela, Thailand, New Zealand, Iran, and Switzerland. You might be surprised at some of the letters that come from members in foreign countries indicating similarity of problems with ours on our own campuses and in our other personnel services. Although not joined together in local Branches, some of the foreign members belong to their own guidance associations and all are much interested in developments in guidance throughout the world.

APGA now has more than 350 graduate students who are active members. Graduate student membership may be held for three years if renewed as such each year.

Multiple memberships appear to be increasing. On April 30, 1956, 2,138 members held membership in more than one Division. On November 30, 1956 that number was 2,287.

Applications for new memberships are increasing rapidly. On November 30 we had 1,217 new members as compared with 817 new members on the same date last year. On April 30, 1956 the total number of new members for the year was 1,280. That this total is being quickly passed is a compliment to the State Membership Chairmen and to the work of the Branches.

Of the many Branches of APGA, one of the most striking is the one in Hawaii. This Branch has more than 40 national members and is very active professionally. We do not have a Branch in Alaska, but we do have several members there. There are several members in Mexico. We have two Canadian Branches, one in New Brunswick and one in British Columbia.

Within the confines of the United States many Branches are taking a great role in improving guidance and personnel services, providing professional stimulus for their members, and increasing national memberships. The work of the Northern California Branch is particularly notable because it has actually been forming another new Branch. It is anticipated that this new group, nurtured by the Northern California Branch, will develop quickly into a new APGA Branch.

This story of membership and the relationship of Branches to membership is a stimulating professional account. Many groups in this country—official, semi-official, and strictly independent professional groups—have recently been looking at APGA with considerable interest and respect. No small part of the credit for this belongs to the professional attitude of our guidance and personnel people that brings them together in this strong national unity.

From all of us here—A very Good New Year to you.—ARTHUR A. HITCHCOCK

Letters

from our readers

Reducing Number of Drop-Outs

To the Editor:

How many students dropped out of your school last year? Why did they leave? Was the cause due to the student, the school, or to outside influence? These questions each school is being asked to answer and challenged to improve involve the five steps needed in trouble-shooting used in efficient management: (1) Symptoms, (2) Trouble, (3) Causes, (4) Results, and (5) Remedy.

The efficient doctor practices preventive medicine rather than remedial medicine; he observes the symptoms. Here are some of the *symptoms* of potential drop-outs: (a) frequent absenteeism; (b) behavior requiring frequent disciplinary actions; (c) failures in more than one school subject; (d) increase of headaches and other minor ailments; (e) over-age for the grade level; (f) indifferent or hostile attitude toward school; (g) lack of interest in school work; (h) indications of poor economic conditions; (i) lack of participation in extra curricular activities; (j) excessive interest in out-of-school youth groups.

The *trouble* is drop-outs. Some of the *causes* are found among the symptoms; what have you found? The *result* is lack of preparation for life. The *remedy* may include the following steps: (a) study the pupil's record to understand him better; (b) have a personal interview with the pupil displaying any of the above symptoms to ascertain why he is acting in this manner and to assure him of your interest in him; (c) visit his home to become acquainted with his parents and the community situation in which he lives; invite his parents to visit the school; (d) get together with all of his teachers and pool their information in an effort to understand him and think through possible solutions; and (e) help the pupil understand himself and help him to plan a program in which he has a reasonable chance of succeeding.

In some schools the teachers use this method to identify and handle possible drop-outs: List all students in your homeroom alphabetically. Underline in red the names of all students who are over age for their grade. Underline in blue the names of all students who are in the lowest quarter of their class. Those whose names have been underlined in both red and blue will be your most probable drop-outs.

RALPH T. CRAIGO
St. Paul, Minnesota

notes from

OUR BRANCHES

Big Bend, Florida

Florida's new APGA branch, the Big Bend Personnel and Guidance Association, has started out with an ambitious project—developing a program of internships in personnel work, in cooperation with Florida State University. The internships—in business, industry, and state agencies—are to be a training ground for promising students as well as an aid to recruiting good people for the increasing number of openings in the Florida personnel field. The group hopes to have the program in operation by next fall.

Wyoming

APGA president Clifford Froehlich, at an October Wyoming Personnel and Guidance Association dinner meeting, discussed counselor-principal relations in the school.

"First of all," Dr. Froehlich said, "I should like to let my principal know that I realize he is the boss." He suggested "sitting down" with the principal and discussing: (1) "what my (the counselor's) responsibilities are in the group guidance program"; (2) "what should be my relationship with the teachers"; (3) the importance of the administrator's awareness of the "unique kind of relationship" that exists when the counselee is given an opportunity for "self-exploration" and his awareness of the "calculated risks" that the counselor must take in the counseling process; (4) the areas of guidance, such as sex, education or religion, that should be avoided in a particular community; (5) the kinds of services the guidance program should attempt to provide and the limitations necessary on those services.

In the community, Dr. Froehlich said, counselors should talk of guidance as an integral function of the school.

WHO'S WHO —and WHERE

JAMES W. CRENSHAW has been appointed Dean of Students at Pratt Institute. He succeeds Miss Margaret B. Stephenson, who served for many years as Director of the Dept. of Student Personnel Services at the Institute.

JAMES S. WEEKS has joined the Guidance faculty of the School of Education, University of Buffalo, as Assistant Professor. He was formerly Assistant Director of the Otsego County Vocational Education and Extension Board, New York.

DOUGLASS BROWN, formerly Assistant Professor of Education and Counselor-Trainer at Boston University, is now Associate Professor at the Florida State University, Tallahassee.

WILLARD W. TENNYSON, previously of the University of Missouri, has joined the Counselor Education staff of the Ohio State University.

FRANK R. PETERS, formerly of the University of Chicago, has accepted the newly created position of Director of Testing and Evaluation at the Counseling and Testing Center, the Ohio State University.

PAUL T. CORRELL is now on the staff of the Ohio State University Counseling and Testing Center as Senior Counselor. Mr. Correll was formerly an assistant professor of guidance at Southern Illinois University

L. N. RECKTENWALD was recently appointed Head of the Psychology Department at Villanova University.

PAUL F. MENGES, formerly Editor, Bureau of Business Management, University of Illinois, Urbana, has accepted an Instructorship in Personnel Management at the University of Washington, Seattle.

LAWRENCE A. LANSNER has been appointed to the post of Placement Director at the Bernard M. Baruch School of Business and Public Administration of the City College of New York City. He was formerly Placement Counselor at the Federation Employment and Guidance Service of New York City.

WILLIAM S. ZERMAN, who was Assistant Dean of Men at the University of Michigan, has been appointed Assistant Dean of Men at Ohio Wesleyan University, Delaware.

BYRON LYNN HARRIMAN, formerly Counseling Psychologist at the Veterans Administration Hospital in Lebanon, Pennsylvania, is now Psychologist at the Federal Reformatory, El Reno, Oklahoma.

JACK F. KIMBALL is now Dean of Students at State University Teachers College, Oneonta, New York, after ten years at the State University of New York in Endicott. With him are two new Assistant Deans of Students, Miss Lou Osinske from the University of Wisconsin, and Miss Edith Cardi from Eastern Illinois State College.

JAMES W. DEAN, former Dean of Students, Coe College, Iowa, has accepted the position of Manager of the Westinghouse Educational Center in Pittsburgh.

GEORGE M. SPENCER is now associated with International Business Machines in their Endicott, New York, Products Development Laboratory. He is Staff Assistant in the Engineering Personnel Department. The previous summer he had acted as Director of Counseling Services and Counselor Training at Appalachian State Teachers College.

Books Reviewed

reviews of recent publications . . . by various contributors

ENCOURAGING SCIENTIFIC TALENT, by Charles C. Cole, Jr., College Entrance Examination Board, c-o Educational Testing Service, P. O. Box 592, Princeton, New Jersey, 1956. ix + 259 pp. $3.50.

CHARLES C. COLE, JR., describes his book as "a study of the loss of talented persons from high school to college and of ways to college and of ways to encourage those with high-level ability, particularly those with scientific talent, to enter institutions of higher education and to follow science careers." The investigation was sponsored by the College Entrance Examination Board at the suggestion, and with the financial support, of the National Science Foundation. A substantial portion of the volume is devoted to a presentation of facts relating to the identification, supply and demand, and loss of scientific talent at the educational breaking point between high school and college. The reviewer agrees with the author's own appraisal that "the most significant [and valuable] original research undertaken as part of this project was the National Study of High School Students and Their Plans."

The first six chapters attempt "to bring together relevant information from all available sources on the nature of scientific ability." Although the sources have been judiciously selected, Dr. Cole's review of the literature is in places so uncritical as to leave the reader confused in the welter of facts and opinions of writers and researchers who have devoted time and attention to the many facets of this important problem. Even so, certain facts loom large in the canvas that Dr. Cole has painted and suggest focal points for further study and possible action—for example, the low production of scientists in the Southeastern and South-Central states, the correlation between the average current expenditure per pupil in the public schools and the number of students continuing on to college.

The National Study of High School Students and Their Plans confirms some suspicions and provides a wealth of new information on the thinking of intellectually gifted students, their motivation for college, their interest in science, and the influence of their economic circumstances upon their decision to enter upon college careers. The survey was conducted by means of a questionnaire and an aptitude test given to twelfth grade students enrolled in a 5 per cent sample of the public high schools in the United States. In the distribution of the questionnaire care was taken to assure adequate representation of schools of different sizes in the four regions into which the country was arbitrarily divided—namely, West, Northeast, Central, and South. A few of the results are worthy of mention, even in this brief review: Of the high-scoring seniors, 70 per cent of the boys and girls indicated their intention of going to college either immediately upon graduation or later. Approximately one quarter of the boys registered a preference for engineering as a field of study, although 38 per cent put it down as their probable field of study. The girls, on the other hand, registered no interest at all in engineering, although one third of them listed mathematics and science, including premedical majors and nursing, as probable fields of study.

The fact is, of course, that only 31 per cent of our young people are actually going to college; hence the questionnaire attempted to explore—without too much success—the reasons why half the high-scoring seniors might not continue their education. Although the matter of expenses was the reason most frequently given, its relative importance appears to be considerably less than one would anticipate. This fact is not surprising when one recalls that, in academic year 1955–1956, in the highest college enrollment in the nation's history, a larger number and a larger proportion of students were paying their own way than ever before. Yet Dr. Cole attaches greatest importance to scholarship aid and concludes that "If the nation is interested in efficient utilization of its intellectual resources, it would appear that at least 150,000 additional scholarships a year for superior boys and girls are needed

FASTER, BETTER READING

For A Good Investment

in

LEARNING POWER

and

EARNING POWER

... use the

AVR RATEOMETER

complete with study manual and carry-case carton **$35**

- **A simple and effective self-help motivator.** Students enjoy its use in any situation: classroom, library reading room, or at home.
- **Compact and lightweight,** ideally suited to issue or rental for daily home use. Class time is freed for visual training, evaluation, and problem diagnosis.
- **Three Rateometers can be purchased for the price of any one comparable unit,** yet its functional design and durability render all others obsolete.
- **Now in nationwide use.**

AUDIO VISUAL RESEARCH

Designers and Manufacturers of Specialized Audio-Visual Equipment

531 S. Plymouth Ct. Dept. V71 Chicago 5

Get Timely Career

GUIDANCE MATERIAL

on

ELECTRONICS

Ideally suited for loan to interested young men. This is factual, timely information for the educator who must answer an increasing number of questions raised by seniors who do not plan to enter college.

Questions such as:

- "What are the opportunities in the Electronics field?"
- "What type of training is needed to qualify as an Electronics Technician?"
- "Who offers the kind of training that meets standards desired by employers?"

These and other important questions about America's fast-expanding Electronics field (including Industrial Electronics ... Automation Electronics ... Television ... Communications ... Military Electronics ... Radio-TV Sales and Service ... Radar ... Electronic Instrumentation) are answered in DeVry Technical Institute's well-illustrated Career Guidance Booklet.

This informative publication is available without charge to educators upon receipt of a request on school stationery.

Ask for special 2-year school calendar at our booth, Personnel and Guidance Convention, April 15–18 in Detroit.

Write Dept. G-4

DeVRY Technical Institute

4141 Belmont Ave., Chicago 41, Illinois

immediately." In the author's conclusions and recommendations the figure is reduced to 100,000, but it still heads his list of recommendations.

Without minimizing its importance, this reviewer challenges the significance attached by Dr. Cole to financial aid in the form of scholarships. He is convinced that aids to the teacher, the guidance counselor, and to the schools, together with serious attention to the high school curriculum, will be far more effective in the long run in achieving the result that Dr. Cole is seeking—that of curbing the current loss and waste of talent and of getting a higher return from the nation's available brainpower.—HOWARD A. MEYERHOFF, *Scientific Manpower Commission, Washington, D. C.*

PERSONNEL AND INDUSTRIAL PSYCHOLOGY, Revised edition. Edwin E. Ghiselli and Clarence W. Brown. McGraw-Hill, 1955.

THIS IS A revision of an earlier text which first appeared in 1948. The topics covered are those traditionally associated with personnel and industrial psychology, and the main effect of the revision is to provide for greater consideration of the rapidly emerging area of human relations. Two new chapters, "Motivation of Workers" and "Social Factors in Industry" replace the single chapter in the earlier text. To accommodate this change, less space is devoted to descriptive material on selection tests and training.

Books in the personnel and industrial field generally choose to emphasize either the "hard science" (measurement, experimental studies of work, etc.) or the "soft science" (morale, leadership, human relations) aspects. This book is in the "hard science" tradition. The new chapters on motivation and social factors do not really succeed in organizing the present research on productivity, leadership and social organization, and at times they are heuristic rather than research oriented. These chapters are the weakest in the book.

The chapters on the more conventional "hard science" topics are in the reviewer's judgment the best available in any present textbook. The approach is rigorous and

professional. Issues are not dodged; and complex matters such as reliability and validity are given the thoroughgoing treatment they deserve. The writing is clear and succinct, but in no sense do the authors try to "dumb down" or glamorize the treatment, a tendency noted in other texts in this field. There are no pictures of happy workers, testing materials, or fancy charts. There is a minimum of descriptive material, case studies, and "illustrative incidents." The exposition is straightforward and compact, with emphasis on principles, concepts, techniques and empirical data. The chapter on job analysis, is to the reviewer's knowledge, the only worthwhile simple treatment in any textbook. It contains a minimum of the pious elaboration of the obvious in which most texts indulge, and confines itself to problems and techniques which have received empirical study. The authors present some interesting unpublished data of their own which make a contribution to the field.

The chapter on measuring job proficiency is unique. It offers a sound and sophisticated treatment of the criteria of job success which should be read by everyone who is concerned with the prediction of occupational success. Its shortcomings lie in the discussion of combining multiple criteria into single composites. This is necessarily a highly statistical problem, and while the major issues are considered, they are dealt with somewhat superficially.

The chapter on rating techniques is probably the best exposition available in current texts. The necessary statistical issues are not avoided, and the more recent developments, such as the Forced-Choice Rating, are discussed.

A "must" for vocational guidance workers is the chapter on the principles and problems in the selection and classification of workers. The descriptive approach to test interpretation—so naturally adopted by many vocational counselors—is reduced neatly to the problem of prediction. Of particular interest to counselors is the treatment given to the distinction between personnel selection and placement, a distinction which is usually confounded or handled amateurishly by other writers. Since the vocational counselor is essentially in the

TAKING A TEST

HOW TO DO YOUR BEST

by Herschel T. Manuel

Prepared especially to help the test *taker* in senior high school and college

- achieve a better understanding of tests and his reasons for taking them
- discover good test-taking practices
- obtain actual experience in taking a variety of tests

GORDON PERSONAL PROFILE

GORDON PERSONAL INVENTORY

by Leonard V. Gordon

Efficient and practical instruments for individual counseling and vocational guidance in high school or college, yielding reliable measures of eight aspects of the total personality. "Forced-choice" technique reduces opportunity for faking responses.

and for your professional library

GUIDANCE AND COUNSELING, The Year Book of Education: 1955

WORLD BOOK COMPANY, Yonkers-on-Hudson, New York

Send For this NEW McKnight
GUIDANCE PUBLICATIONS

CATALOG...

Describes over 20 interesting, practical and educational GUIDANCE BOOKS.

TYPICAL McKNIGHT GUIDANCE BOOKS

NEW: GUIDANCE IN ELEMENTARY SCHOOLS—Cottingham

- Selecting an Occupation
- Understanding Ourselves
- As Others Like You
- Tests on Social Usage
- Practical Parliamentary Procedure
- Teaching Multiple Activities in Industrial Education.

McKnight & McKnight Publishing Co.
Dept. 428, Bloomington, Illinois.
Name.....
Address.....
City.....State.....

placement business, this section makes extremely profitable reading.

Also of special importance to those in the vocational counseling field is the material on psychological tests. Here the reader will find a excellent summary of a tremendous amount of research concerning what tests predict what criteria in what jobs. This material, which is a narrative condensation of the authors' publication, *The Validity of Commonly Employed Occupational Tests* (University of California Press, 1949), is a distillation of hundreds of research studies on test validity.

The remaining chapters on human work and the conditions of work are notable for their well organized formulation of conclusions from this unwieldy area of research. A chapter each on human engineering, accidents, and training round out the field in a workmanlike manner.

This is an industrial psychologist's book on industrial psychology. It is aimed at the serious student, and it requires a well equipped instructor to teach it. And if read by the enlightened manager, it would certainly deter "self-doctoring" with its inevitable disillusionment and strengthen the conviction that here is a professionally mature area which has acquired a technology of its own.—JAMES N. MOSEL, *Department of Psychology, George Washington University.*

THE COMPREHENSIVE HIGH SCHOOL, by Franklyn Jefferson Keller, New York: Harper and Brothers, 1955. $4.00.

AFTER THE author had made a country wide survey visiting 77 schools, this 269-page book was written. It gives a rather complete analysis of what the author believes are the objectives of a comprehensive high school as opposed to the specialized vocational, commercial or academic schools. With his philosophy, this reviewer—who for a number of years was director of guidance in a large middle western comprehensive high school—is in complete agreement. However, the book is not easy reading, being poorly organized, repetitious, and "padded" with much unnecessary and extraneous material. The best features are the detailed descriptions of the comprehensive schools visited. One can get a very complete summary of the salient features of the book by reading the author's article, "What We Know About Comprehensive High Schools," pages 16 to 22 in the May 1955 number of *The Bulletin of the National Association of Secondary-School Principals,* Vol. 39, number 211. A fully comprehensive high school, says Keller, "is one that combines all the best features of an academic high school and a vocational high school, and, therefore, serves the needs of all youth in the community." One of the fundamental criteria of the comprehensive high schools, according to the author, is that every pupil in the school must have at least one close adult friend on the faculty who will be continuously responsible for his welfare from admission to graduation,—this is the teacher who meets him in the homeroom every day, who is always against the slings and arrows of outrageous educational fortune. "Whatever else a school may have or be, if it does not provide a continuous three-or-four-year-homeroom teacher—counselor for each pupil, it fails to function fully as an educational institution." JOHN F. SHOWALTER, *Associate Professor of Education, University of Richmond, Richmond, Virginia.*